DOCUMENT RESUME

ED 141 006 95 RC 009 942

AUTHOR Sher, Jonathan P.; Rosenfeld, Stuart A.
TITLE Public Education in Sparsely Populated Areas of the United States.
INSTITUTION National Inst. of Education (DHEW), Washington, D.C.
PUB DATE Apr 77
NOTE 110p.; Page 13 may not reproduce well due to small print size of original document. A Country Paper prepared for the Center for Educational Research and Innovation, Organization for Economic Co-operation and Development, Paris, France

EDRS PRICE MF-$0.83 HC-$6.01 Plus Postage.
DESCRIPTORS *Consolidated Schools; Curriculum; Delivery Systems; *Financial Support; Organization; *Public Education; *Rural Areas; *School Personnel; Special Education; *State of the Art Reviews; Teacher Education

ABSTRACT

Discussing "rural" and "nonmetropolitan" education with the knowledge that these are more broadly inclusive categories than would normally be found in a "sparsely-populated area" education report, this paper relies upon available data and presents five sections which essentially constitute a state of the art review of education in the sparsely populated areas of the U.S. Specifically, the five sections of this paper attempt the following: (1) to provide an overview of rural America and its schools in terms of a variety of demographic, economic, and educational factors; (2) to examine the issue of school and school district organization in sparsely-populated areas with an emphasis on the consolidation movement; (3) to explore several school finance issues which have particular relevance for rural areas of the U.S.; (4) to address long-standing problems associated with delivering educational services in sparsely-populated areas, especially regarding both support services and specialized curricular offerings; and (5) to present background information on personnel issues in rural education, such as teacher salaries, migration, and training programs. (JC)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED141006

PUBLIC EDUCATION IN SPARSELY POPULATED AREAS OF THE UNITED STATES

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

CO09942

The National Institute of Education
U.S. Department of Health, Education and Welfare
Washington, D.C. 20208

PUBLIC EDUCATION IN SPARSELY POPULATED AREAS

OF THE UNITED STATES

A Country Paper Prepared for the
Center for Educational Research and Innovation,
Organization for Economic Co-Operation and Development,
Paris, France

By

Dr. Jonathan P. Sher
Chief Education Advisor
National Rural Center
Washington, D.C.

Dr. Stuart A. Rosenfeld
Education Policy Fellow
National Institute of Education
Department of Health, Education and Welfare
Washington, D.C.

April 1977

Cover graphic was done by Ms. Lucy Doane of North Bennington, Vermont and appeared in School Bells Among Green Hills, a publication of the Association of Retired Teachers of Vermont.

INTRODUCTION

In order to understand the unique characteristics of public education in sparsely populated areas of the United States, it is necessary first to understand the larger societal context in which such educational systems operate. Accordingly, each section of this report attempts to establish an appropriate and accurate context for the specific set of issues being addressed. However, there are two characteristics of American education which are of overriding importance here.

First, there is a three-tiered educational system in the United States. Since the U.S. Constitution vests no explicit responsibility for education to the national government, the federal education agencies are relatively weak and their influence tends to be indirect. With rare exceptions, the federal government operates no schools, nor does it determine educational expenditures, salary levels, curriculum guidelines, classroom practices, or teacher and school standards. In fact, the federal government does not even require compulsory school attendance.[1] Rather, the bulk of the federal effort in education is directed toward aiding disadvantaged children and schools through a variety of formula and categorical aid programs. Federal outlays for education totaled less than 10 percent of all U.S. school expenditures in 1976.[2]

Legally, each of the fifty states has been responsible for the education of all the children within its borders. However, it is only in recent years that state education agencies have either contributed a major share of education funds or assumed an active role in regulating and/or controlling its schools. Once again, it is very unusual for any state to directly operate elementary or secondary schools.[3] But, state involvement in the organization, finance, and

internal affairs of local schools is far greater than for their federal counterparts. State aid to education equalled approximately 40 percent of total school expenditures in 1976.[4]

In practice, locally-controlled education agencies (normally found at the county or town level) have actually operated the schools. Currently, there are more than 16,000 of these independent local education agencies in the United States, which are responsible for more than 85,000 schools.[5] Local funds account for approximately 50 percent of total U.S. education expenditures.[6]

Second, there is no national rural education policy in the United States. In part, this absence of national goals, plans, and strategies is reflective of both a weak federal education system and a more general disregard for a national rural policy of any kind. In the United States, there is no organized "rural" lobby. Rural individuals have instead chosen to organize along occupational (e.g., farmers or miners), regional (e.g., southerners or New Englanders), or racial/ethnic (e.g., Hispanic or native American) alliances. Thus, as a political entity, rural America currently equals far less than the sum of its parts.

The educational implications of this circumstance are significant. Rural schools have been somewhat ignored by both state and federal education authorities and, as a consequence, have received disproportionately low levels of governmental assistance, resources, and attention. For example, there is no Bureau of Rural Education in the U.S. Office of Education, the National Institute of Education, the U.S. Department of Agriculture, or the great majority of state education agencies.

Researchers too have tended to exclude rural schools and school districts from their efforts. Neither the National Center for Educational Statistics nor the U.S. Bureau of the Census compile or analyze data or issue reports on rural education. In fact, data on rural education tends to be, at

best, scanty and, at worst, simply non-existent. Given the fact that "education in sparsely-populated areas" is a sub-set of rural education, it is nearly an unknown entity in terms of the existing data. Thus, in this report, we are forced to discuss primarily "rural" and "non-metropolitan" education, with the knowledge that these are more broadly inclusive categories than would normally be found in a "sparsely-populated area" education report.

Despite these data limitations, we are convinced that the topics addressed here are consistent with the overall intent of this OECD/CERI project. More specifically, this country paper is divided into the following five sections:

> Section I provides an overview of rural America and its schools in terms of a variety of demographic, economic, and educational factors;
>
> Section II examines the issue of school and school district organization in sparsely-populated areas with an emphasis on the consolidation movement;
>
> Section III explores several school finance issues which have particular relevance for rural areas of the U.S.;
>
> Section IV is concerned with the long-standing problems associated with delivering educational services in sparsely-populated areas, especially regarding both support services and specialized curricular offerings; and
>
> Section V presents background information on personnel issues in rural education, such as teacher salaries, migration, and training programs.

I. PLURALISM IN THE COUNTRYSIDE: AN OVERVIEW OF RURAL AMERICA AND ITS SCHOOLS

Like the parable of the blind men and the elephant, attempts to describe rural America are confounded by both its nature and its dimensions.

Just at the blind man holding the elephant's trunk thought that the whole animal must be very much like a snake, while the other blind man, feeling its leg, thought elephants closely resembled trees, so too, distorted images of rural America have grown from vivid descriptions of small segments. For example, one popular image of rural America is that of an agglomeration of farmers and farm workers. Yet, as of 1975, more than 80 percent of America's rural population neither lived nor worked on farms.[1]

The simple fact is that rural people, rural communities, and rural conditions are so diverse that one can find evidence to support nearly any characterization. Someone wishing to describe rural America as a collection of Lilliputs, or as bastions of racism, cultural and economic stagnation, reactionary politics, and stifling social environments will not have a difficult time finding rural communities which substantiate this negative analysis. However, another person desirous of portraying rural America as a network of stable, efficient, thriving communities, or as the nation's best example of social egalitarianism, economic independence, cultural continuity, participatory democracy, and institutional accountability will have equal ease in justifying this favorable characterization.

The point is that rural America is far too heterogeneous and complex to be amenable to simplistic definitions or comfortable stereotypes. Remembering that fishing villages in Maine, coal company towns in Appalachia, farm

communities in Iowa, Delta counties in Mississippi, recreation communities in Colorado, Indian reservations in South Dakota, small college towns in Minnesota, migrant settlements in Texas, retirement communities in Florida, and Alaskan native villages are all "rural" leaves one feeling less than sanguine about sweeping generalizations.[2]

It should also be noted that unlike America's central cities, the heterogeneity of rural America exists primarily between communities rather than within them. Internally, the population of most rural communities is actually quite homogenous. The exceptions here are in the southern and southwestern regions of the United States where many rural communities are polarized along racial lines or by ethnic origin.

Identifying Rural Populations Within the United States

We know in a general way that "rural" implies both small communities and low-population density ratios. However, since "rural" is a relative term, all population and density-based definitions are inherently suggestive rather than definitive.

The two most popular definitions of rural America reflect this arbitrariness. Both are population-based and both define rural America in terms of what it is not rather than what it is. Thus, the Census Bureau carefully defines urban (essentially all places having a population of 2,500 or more), and then classifies all that remains as rural.[3] Similarly, demographers and statisticians have established complex criteria for identifying Standard Metropolitan Statistican Areas (SMSAs), and then designate everyone and everyplace not meeting the criteria as non-metropolitan (see Figure 1).[4]

Although these two categories are the only ones commonly used to collect data on rural America, it must be understood that neither is consistent with prevailing impressions of rural life. For example, the Census definition of

Figure 1

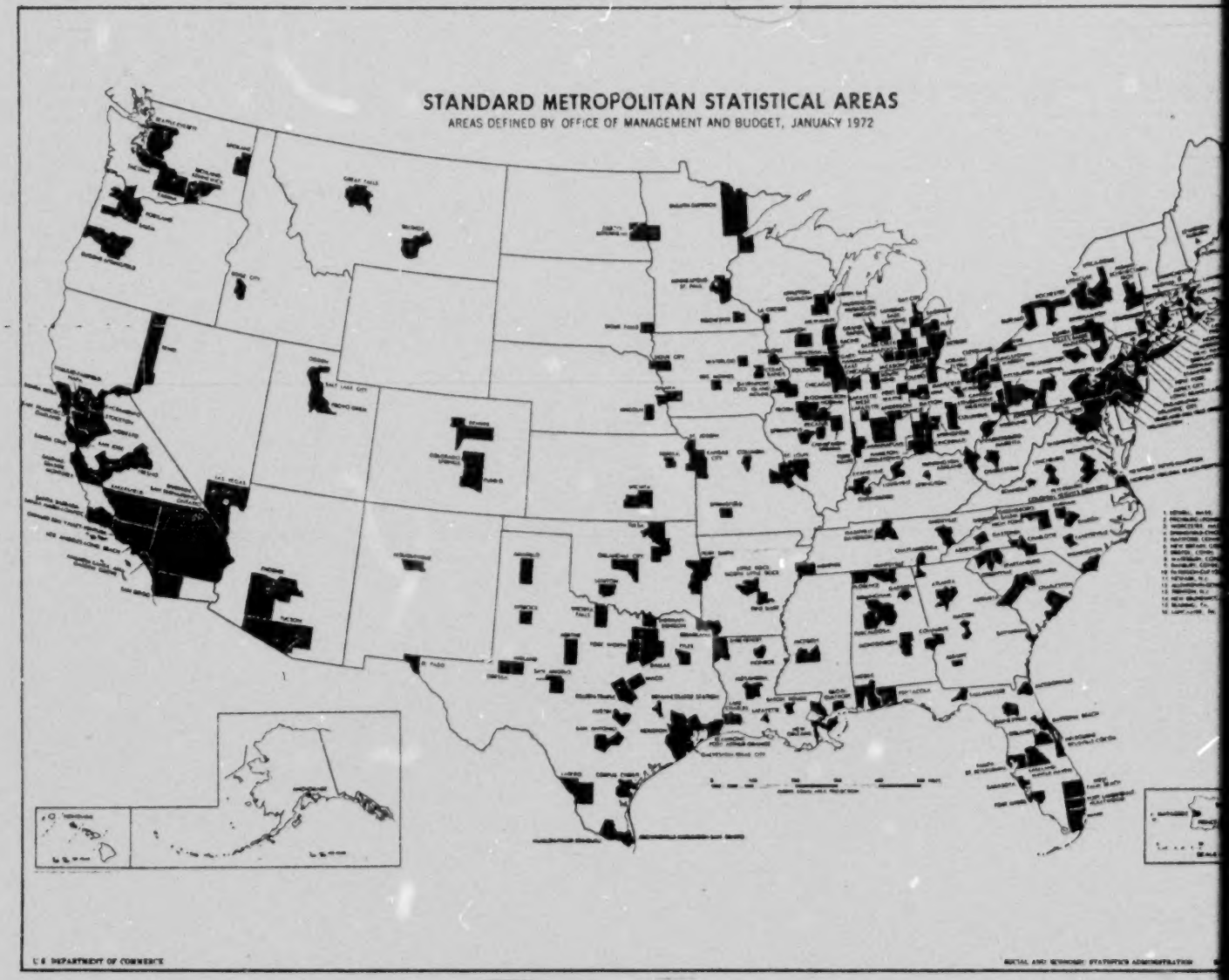

STANDARD METROPOLITAN STATISTICAL AREAS
AREAS DEFINED BY OFFICE OF MANAGEMENT AND BUDGET, JANUARY 1972

Figure 1

STANDARD METROPOLITAN STATISTICAL AREAS
AREAS DEFINED BY OFFICE OF MANAGEMENT AND BUDGET, JANUARY 1972

"rural" includes more than 16 million people living within SMSAs, while excluding more than 26 million people living outside the boundaries of any metropolitan area.[5] Thus, a residential enclave with a population of 2,000 located fifteen miles away from a city is "rural" in Census calculations, while a community of 2,600 people located hundreds of miles from any metropolitan area is considered to be "urban" by the Census Bureau. Likewise, the basic problem with the "non-metropolitan" definition is that it includes some places having up to 50,000 residents--a population concentration far higher than one normally thinks of as rural.

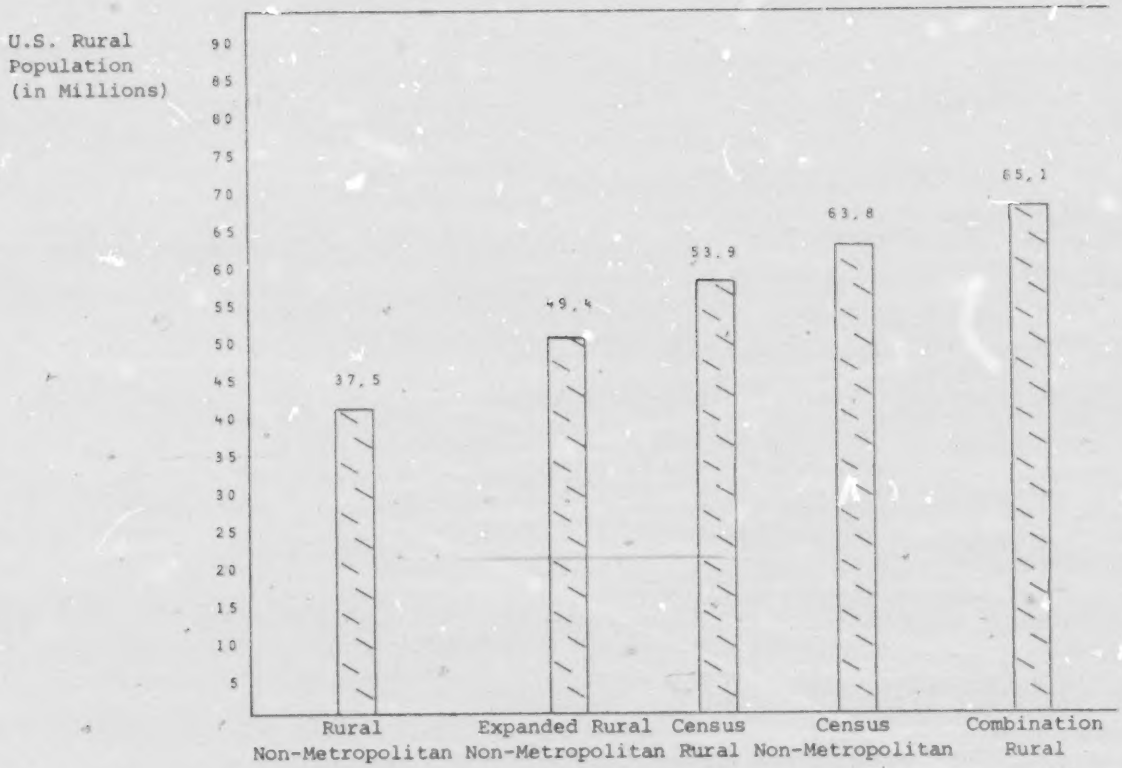
As Figure 2 reveals, this concern about definitions is more than academic. Depending upon the definition used, America's 1970 rural population ranged from 37.5 million to 65.1 million individuals. This represented from 18.5% to 32% of the total United States population in 1970. Thus, it is important to be aware of the potential dimensions of America's rural constituency and the dramatic differences resulting from seemingly innocuous alterations in the definitions used.

One final note on definitions. Although they are equally arbitrary, density-based definitions of "rural" may be appropriate and useful to researchers and policymakers in some cases. Certainly, they illustrate some striking differences in settlement patterns (see Figures 3 and 4). According to Census data, urban population density averaged 2,760 people per square mile (including a figure of 67,808 per square mile in Manhattan), while rural population density averaged fifteen people per square mile.[6]

Still, aggregate national statistics do not adequately reflect the enormous variance in the size and significance of the rural population at the state level. For example, Pennsylvania has more than 3 million rural residents, while Nevada has less than 100,000. More than 67.8 percent of Vermont's population live in rural communities, but only 12.9 percent of Rhode Island's

Figure 2

U.S. Rural Population, by Definition, 1970



SOURCE: U.S. Bureau of the Census, U.S. Census of Population, Vol. I; also, U.S. Bureau of the Census, Statistical Abstract of the United States, 1976, Section I.

NOTE: Rural Non-Metropolitan. "All farms, open countryside and places of less than 2,500 residents outside SMSAs." This is the most restrictive definition (18.5% of total U.S. population in 1970).
Expanded Rural Non-Metropolitan. "All farms, open countryside and places of less than 10,000 residents outside SMSAs." This definition is used occasionally in Congressional legislation (24.9% of total U.S. population in 1970).
Census Rural. "All farms, open countryside and places of less than 2,500 residents, both within and outside of SMSAs." This, in simplified terms, is the U.S. Census Bureau's definition (26.5% of total U.S. population in 1970).
Census Non-Metropolitan. "All farms, open countryside and places of less than 50,000 residents outside SMSAs." This distinction (rather than urban-rural) is increasingly used for analytic purposes (31.4 % of total U.S. population in 1970).

Figure 3

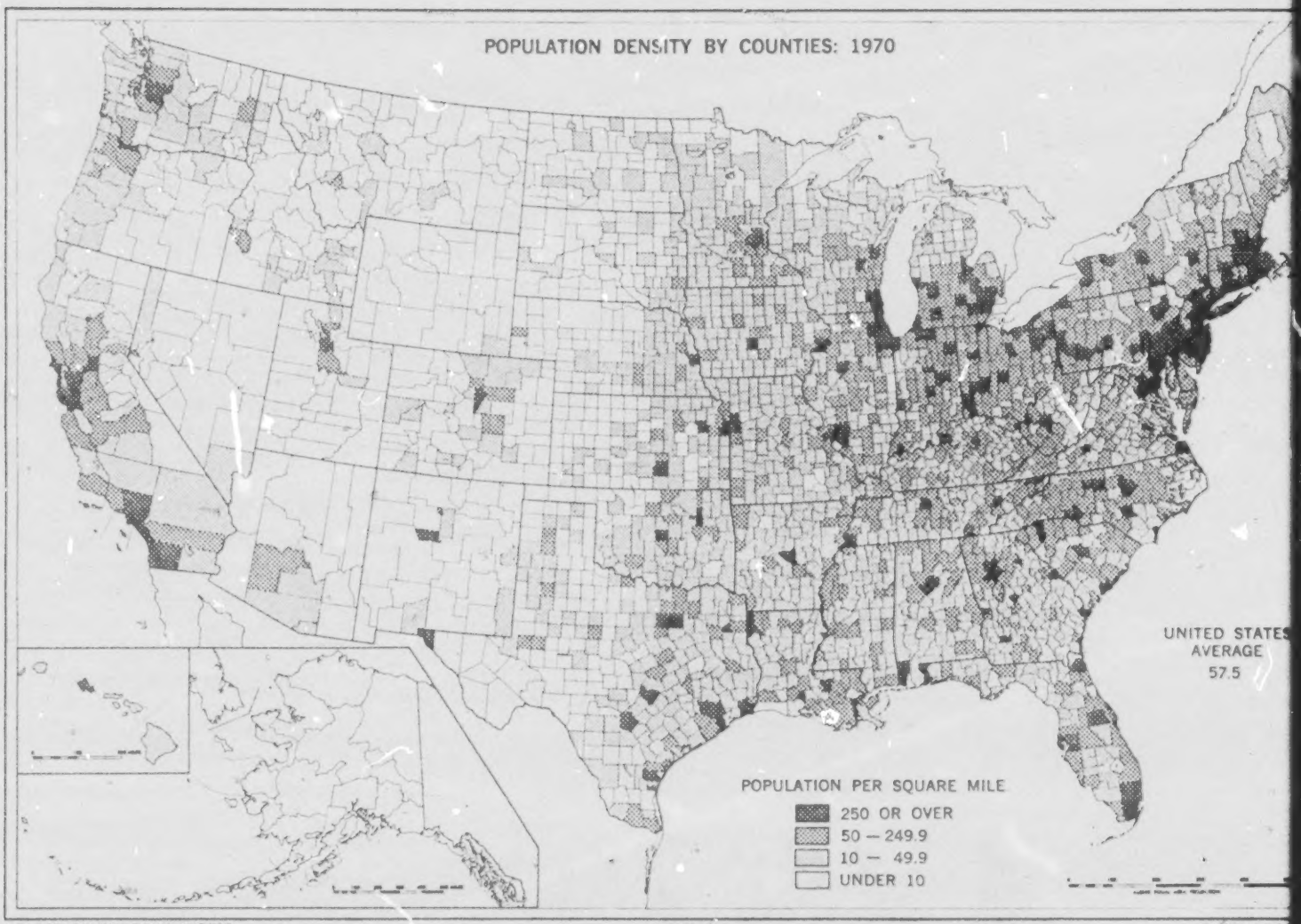

POPULATION DENSITY BY COUNTIES: 1970
UNITED STATES AVERAGE 57.5
POPULATION PER SQUARE MILE
250 OR OVER
50 — 249.9
10 — 49.9
UNDER 10
U.S. DEPARTMENT OF COMMERCE
71-18
BUREAU OF

Figure 3

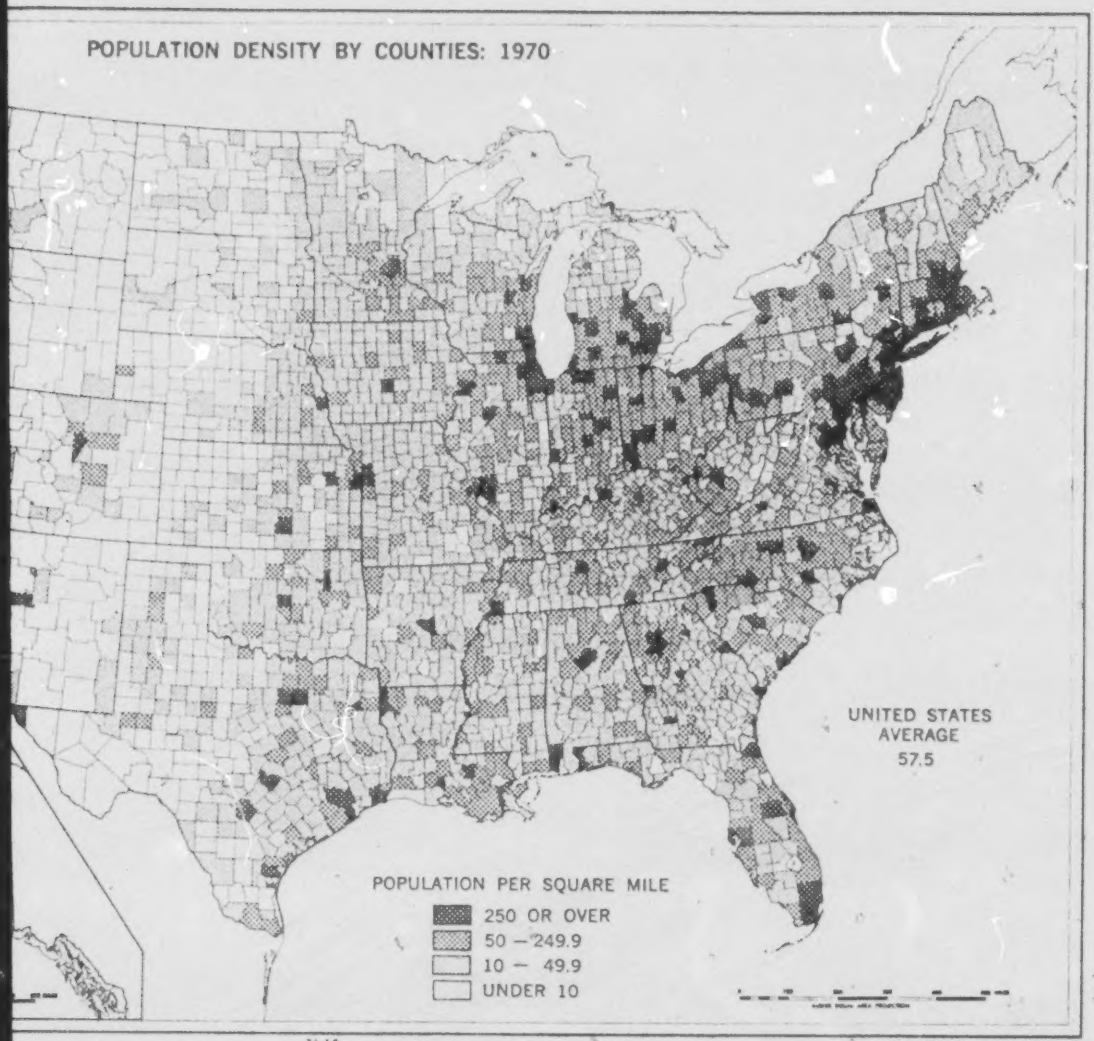

POPULATION DENSITY BY COUNTIES: 1970
UNITED STATES AVERAGE 57.5
POPULATION PER SQUARE MILE
250 OR OVER
50 — 249.9
10 — 49.9
UNDER 10
71-14
BUREAU OF THE CENSUS

Figure 4

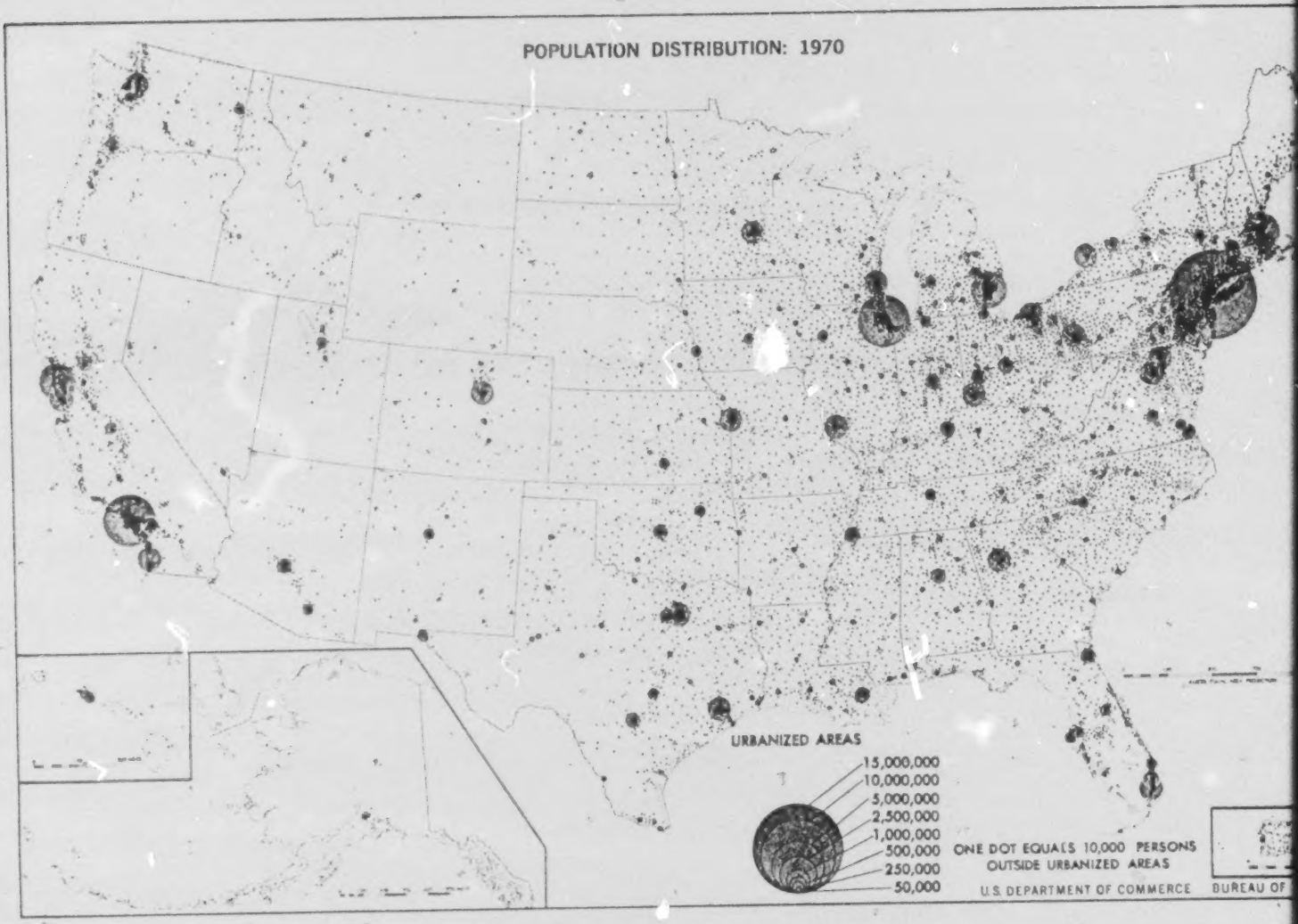
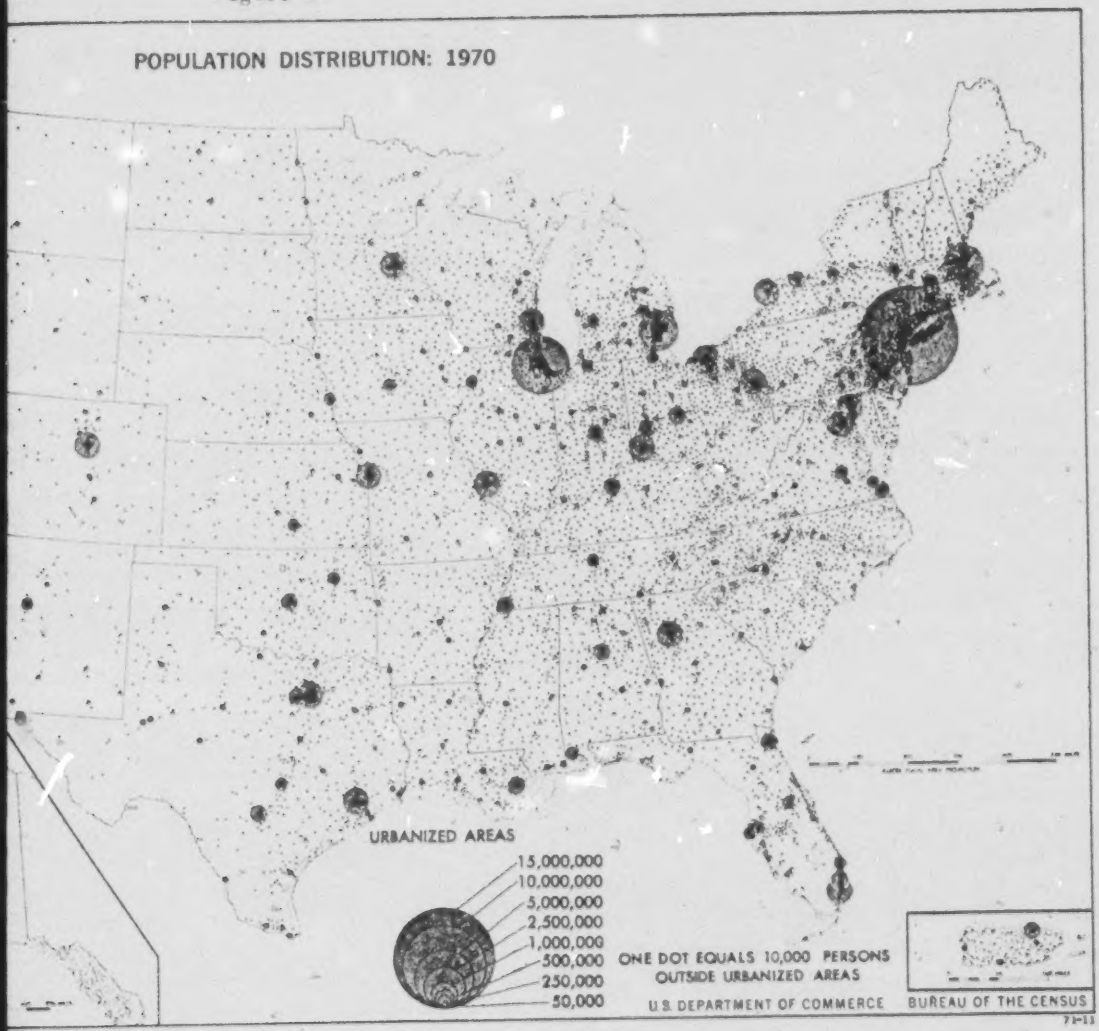

POPULATION DISTRIBUTION: 1970
URBANIZED AREAS
15,000,000
10,000,000
5,000,000
2,500,000
1,000,000
500,000
250,000
50,000
ONE DOT EQUALS 10,000 PERSONS OUTSIDE URBANIZED AREAS
U.S. DEPARTMENT OF COMMERCE
BUREAU OF

Figure 4


POPULATION DISTRIBUTION: 1970
URBANIZED AREAS
15,000,000
10,000,000
5,000,000
2,500,000
1,000,000
500,000
250,000
50,000
ONE DOT EQUALS 10,000 PERSONS OUTSIDE URBANIZED AREAS
U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
71-11

population is rural. Two states (Wyoming and Vermont) have no SMSAs at all, and twenty other states have more than half of their population in non-metropolitan areas. Yet, there are twelve states in which the non-metropolitan population constitues less than 20 percent of the state's total number of residents. California is an interesting case in that it has nearly 2 million rural residents (more than in forty other states), yet less than 10 percent of its total population is in rural areas (making it the least rural of the fifty states).

Population density statistics also demonstrate the tremendous disparities existing among states. At the extremes, Alaska averages one citizen per square mile, while New Jersey has 953. As Figures 3 and 4 revealed, the western states have the lowest population density ratios, but there are thirty-three states which average less than one hundred people per square mile. Table 1 presents a detailed state-by-state comparison of these rural population statistics.

More important than these broad population figures is the fact that since 1970, rural America's population base has experienced a significant resurgence. As one of the nation's leading demographers, Calvin Beale concluded:[7]

> The vast rural-to-urban migration of people that was the common pattern of U.S. population movement in the decades after World War II has been halted and, on balance, even reversed. During 1970-73, non-metropolitan areas gained 4.2 percent in population compared to only 2.9 percent for metro areas.

Beale goes on to state that:[8]

> As might be expected [counties adjacent to metropolitan areas] have had the highest population growth since 1970 (4.7 percent) and have acquired about five-eighths of the total net in-movement into

---

continuation of Note to Figure 2, page 8:

> Combination Rural. "Census rural definition plus all non-metropolitan places between 2,500 and 10,000." Though rarely used now, this definition is both the most permissive and in many respects the most reasonable (32% of total U.S. population in 1970).

TABLE 1

RANK ORDER OF STATES, BY RURAL AND NON-METROPOLITAN POPULATION CHARACTERISTICS, 1970

State	Total Population	Rank	Rural Population	Rank	% Rural	Rank	Non-Metropolitan Population	Rank	Percent Non-Metropolitan	Rank	Population Density (Per Square Mile)	Rank
Alabama	3,444,165	21	1,432,224	15	41.6	16	1,525,291	19	44.3	23	63	26
Alaska	300,382	50	154,970	46	51.6	8	193,127	46	64.3	12	1	50
Arizona	1,770,900	31	561,036	37	20.4	39	452,328	42	25.5	34	16	41
Arkansas	1,923,295	32	962,430	24	50.0	9	1,328,265	21	69.1	10	37	34
California	19,953,134	1	1,617,789	10	8.1	50	1,322,470	22	6.6	50	128	13
Colorado	2,207,259	30	471,946	35	21.5	38	625,320	33	28.3	32	21	39
Connecticut	3,031,709	24	666,657	32	22.0	37	527,109	40	17.4	44	624	4
Delaware	548,104	46	152,535	46	27.8	32	162,248	47	29.6	31	277	7
Florida	6,789,443	9	1,321,306	18	19.5	42	1,279,631	24	18.9	42	126	14
Georgia	4,589,575	15	2,821,501	9	39.1	18	2,309,296	9	50.3	21	79	24
Hawaii	769,561	40	129,978	48	16.9	45	139,365	49	18.1	43	120	15
Idaho	712,567	42	327,533	39	45.9	13	600,778	36	84.3	3	9	43
Illinois	11,113,976	5	1,884,155	7	17.0	44	2,210,102	6	19.9	39	193	10
Indiana	5,193,669	11	1,921,609	8	35.1	22	1,978,780	8	38.1	29	144	12
Iowa	2,824,375	25	1,207,971	22	42.8	15	1,819,443	14	64.4	13	51	28
Kansas	2,249,578	28	761,708	30	33.9	24	1,297,479	23	57.6	17	28	37
Kentucky	3,218,706	23	1,539,653	17	47.7	11	1,931,084	10	60.0	15	81	21
Louisiana	3,641,306	20	1,235,156	20	33.9	24	1,527,031	18	41.9	26	81	22
Maine	992,048	38	487,891	34	49.2	10	779,564	31	78.6	7	32	36
Maryland	3,922,399	18	918,464	26	23.4	36	612,657	34	15.6	45	387	5
Massachusetts	5,689,170	10	876,721	27	15.4	46	871,255	28	15.3	46	727	3
Michigan	8,875,083	7	2,321,310	5	26.2	34	1,922,060	11	21.7	38	156	11
Minnesota	3,804,971	19	1,277,663	19	33.6	26	1,639,883	17	43.1	24	48	30
Mississippi	2,216,912	29	1,230,270	21	55.5	4	1,823,424	13	82.3	6	47	32
Missouri	4,676,501	13	1,398,618	16	29.9	30	1,679,554	16	35.9	30	68	26
Montana	694,676	43	323,733	40	46.6	12	525,238	41	75.6	8	5	47
Nebraska	1,483,493	35	570,733	33	38.5	20	847,027	29	57.1	18	19	40
Nevada	488,738	47	93,402	50	19.1	43	94,382	50	19.3	41	4	48
New Hampshire	737,681	41	321,641	41	43.6	14	535,908	39	72.7	9	82	20
New Jersey	7,168,164	8	794,759	29	11.1	49	609,642	35	8.5	49	953	1
New Mexico	1,016,000	37	307,225	42	30.2	29	700,226	32	68.9	11	6	46
New York	18,190,740	2	2,633,294	3	14.5	47	2,142,128	7	11.8	48	381	6
North Carolina	5,082,059	12	2,796,891	2	55.0	6	3,034,650	1	59.7	16	104	17
North Dakota	617,761	45	344,319	38	55.7	3	544,108	38	88.1	5	9	43
Ohio	10,652,017	6	2,626,320	4	24.7	35	2,319,030	3	21.8	37	260	9
Oklahoma	2,559,229	27	819,092	28	32.0	28	1,278,537	25	50.0	22	37	34
Oregon	2,091,385	31	688,681	31	32.9	27	810,650	30	38.8	27	22	38
Pennsylvania	11,793,909	1	3,363,499	1	28.5	31	4,311,679	4	19.6	40	262	8
Rhode Island	946,725	39	122,422	49	12.9	48	144,649	48	15.3	46	905	2
South Carolina	2,590,516	26	1,358,321	17	52.4	7	1,399,310	20	54.0	19	86	19
South Dakota	665,507	44	368,879	36	55.4	5	571,048	37	85.8	4	9	43
Tennessee	3,923,561	17	1,618,380	12	41.3	17	2,006,320	6	51.1	20	95	18
Texas	11,196,730	4	2,275,784	6	20.3	40	2,802,148	2	25.0	35	43	33
Utah	1,059,273	36	207,801	44	19.6	41	237,564	45	22.4	36	13	42
Vermont	444,732	48	301,441	43	67.8	1	444,732	43	100.0	1	48	30
Virginia	4,648,494	14	1,713,653	11	36.9	21	1,802,460	15	38.8	27	117	16
Washington	3,409,169	22	932,701	25	27.4	33	920,688	27	27.0	33	51	28
West Virginia	1,744,237	34	1,064,746	23	61.0	2	1,112,176	26	63.8	14	74	25
Wisconsin	4,417,731	16	1,506,854	14	34.1	23	1,974,756	12	42.4	25	81	21
Wyoming	332,416	49	111,305	47	33.5	19	332,416	44	100.0	1	3	49
U.S. TOTAL	203,184,772	--	53,884,804	--	26.5	--	59,366,445	--	29.5	--	57	--

SOURCE: U.S. Bureau of the Census, 1972 Census of Governments, Vol. I; Also, U.S. Bureau of the Census, Statistical Abstract of the United States, 1976, Section 1.

all non-metro counties. However, the more significant point is that nonadjacent counties have also increased more rapidly than metro counties (3.7 percent vs. 2.9 percent). Thus, the decentralization trend is not confined to metro sprawl. It affects non-metro counties well removed from metro influence. Indeed, the trend can be said especially to affect them.

Thus, for the foreseeable future, rural America's existence as both a significant segment of the U.S. population and a vital sector of the nation's economy seems assured.

Socio-Economic Characteristics of Rural America

In 1967, the President's National Advisory Committee on Rural Poverty issued a powerful report entitled The People Left Behind which revealed the extent to which rural people were deprived of their fair share of America's wealth and public services and were excluded from the standard of living enjoyed in metropolitan areas of the United States.[9] This report documented that rural America has the nation's highest rates of poverty, illiteracy, malnutrition, infant mortality, underemployment, substandard housing, inadequate public services, and below-average per capita and family incomes.[10]

Of course, this harsh profile did not (and does not) apply to all rural communities or all rural residents. As noted earlier, rural America includes everything from prosperous farming areas, stable college towns, and growing recreation and retirement communities to decaying company towns, stagnant communities, and wholly depressed areas. And, while the adverse conditions described in the Committee's report exist throughout the nation's rural areas, they are more prevalent in the South as a region, and among Black, Hispanics, Native Americans, and other minority group populations.

Some absolute gains have been made on each of the indices during the decade since the issuance of The People Left Behind. However, the gap between metropolitan and non-metropolitan areas has only slightly narrowed and the

relative position of rural America remains substantially unchanged. There is still a disproportionately high number of low-income rural citizens whose access to adequate housing, transportation, health services, and other critical resources is severely constrained. And, despite all the progress made thusfar, these problems continue to beset minority populations to an extent far greater than is true for their non-minority counterparts.

The economy of rural America has not undergone any radical changes in recent years. Rather, the trends and forces which have shaped the rural economy for the past thirty years continue to predominate. Thus, although farming, fishing, mining, lumbering, ranching, and other natural resource-based and/or extractive enterprises still comprise the core of the rural economy, there is both a gradual trend toward industrialization and a more marked trend toward service industries, in general, and tourism and recreation enterprises, in particular, within rural areas of the United States.

Table 2 presents several indicators of rural America's current socio-economic status.

Current Status of Education

Like rural America as a whole, rural schools and school districts are distinguished by their diversity. Despite increasing standardization, rural schools still tend to reflect the pluralism found among the rural communities they serve.

Perhaps the most surprising fact about non-metropolitan schools is the number of students who attend them. In 1975, there were more than 15 million children (ages 5 through 17) enrolled in non-metropolitan schools (including 13.6 million white children and 1.8 million black or other minority group children).[11] In other words, 32 percent of all children enrolled in public schools in the United States are enrolled in non-metropolitan schools.[12] In

TABLE 2

SELECTED SOCIO-ECONOMIC INDICES, BY RESIDENCE AND RACE

Residence and Race	Total Population (Millions) 1970	Median Family Income (Dollars) 1975	% of U.S. Median Family Income 1975	Persons Below Poverty Level (Millions) 1975	% Below Poverty Level 1975	Substandard Housing (Thousands) 1970	Percent Substandard 1970	Une
U.S. TOTAL	203.2	13,719	100	25.9	12.3	4,741	7.4	
Metro Areas								
All Races	139.5	14,909	109	15.4	10.8	1,863	4.2	
White	120.6	15,548	113	10.0	8.2	N/A	N/A	
Black	16.8	9,494	69	4.9	27.6	N/A	N/A	
Non-Metro Areas								
All Races	63.8	11,600	85	10.5	15.4	2,878	14.2	
White	57.2	12,020	88	7.7	12.6	N/A	N/A	
Black	5.8	6,684	49	2.6	42.4	N/A	N/A	
Farm	9.7	10,845	79	1.3	16.4	N/A	N/A	

SOURCES: U.S. Bureau of the Census, Statistical Abstract of the United States, 1976; U.S. Bureau of the Census, Cu Population Reports - Consumer Income (September 1976); and U.S. Department of Labor, Employment and Earni (January 1977).

TABLE 2

D SOCIO-ECONOMIC INDICES, BY RESIDENCE AND RACE

Family ome ars) 75	% of U.S. Median Family Income 1975	Persons Below Poverty Level (Millions) 1975	% Below Poverty Level 1975	Substandard Housing (Thousands) 1970	Percent Substandard 1970	Unemployment 1975
19	100	25.9	12.3	4,741	7.4	8.5
09	109	15.4	10.8	1,863	4.2	8.7
48	113	10.0	8.2	N/A	N/A	7.9
94	69	4.9	27.6	N/A	N/A	13.8
00	85	10.5	15.4	2,878	14.2	8.0
20	88	7.7	12.6	N/A	N/A	7.4
84	49	2.6	42.4	N/A	N/A	14.1
15	79	1.3	16.4	N/A	N/A	3.4

tistical Abstract of the United States, 1976; U.S. Bureau of the Census, Current Income (September 1976); and U.S. Department of Labor, Employment and Earnings

comparative terms, there are more students in non-metropolitan schools than there are in central city schools.[13] In fact, the total number of non-metropolitan students is greater than the total population of New York City, Los Angeles, and Chicago combined.[14]

"Rural education" encompasses everything from a one-room schoolhouse in an Appalachian hollow to a western school district responsible for education within a several-hundred-square-mile region. It includes both units having lots of students but very little money, and units with lots of money but very few students. The fastest growing school districts in the nation are in rural areas, but so are the ones experiencing the most rapidly declining enrollments. Some rural schools are quite self-sufficient and would be considered excellent by nearly any standard, while others are woefully inadequate and desparately in need of assistance. As a consequence, treating rural schools and school districts as if they were a unified, monolithic entity would be a serious mistake. The "primacy of local circumstance" is as applicable to the formulation of rural educational policy as it is to rural communities in general.

Despite this caveat, it is clear that rural schools have historically shared several common problems. For example, reducing student non-enrollment and absenteeism, recruiting highly competent teachers and administrators, providing special education and other specialized services, securing needed capital and operating funds, and compensating for the inherent isolation and population sparsity of rural areas, are all problems which have both persistently plagued rural schools and which remain largely unsolved even today.

Educational attainment has been another major problem within rural schools across the country. Adult attainment statistics reveal the long-term nature of this problem. In 1970, there were 500,000 rural adults who had had no schooling whatsoever.[15] Further, a 1974 Census Bureau survey found that more

than 2 million rural adults had had less than five years of school, and thus were considered to be functionally illiterate.[16] As always, these problems were even more pronounced among rural Black and Hispanic populations. In fact, 24.1 percent of all Black adults and 30.7 percent of all Hispanic adults in rural areas had dropped out of school by the fifth-grade.[17]

Sadly, this trend continues today. A recent research report indicates that at least 5.3 percent of all rural school-aged children are not enrolled in any school.[18] This represents a non-enrollment rate nearly twice that of urban areas.[19]

Even when enrolled and in regular attendance, attainment problems persist. No matter what standardized testing systems or assessment programs are employed, researchers have found that rural schoolchildren consistently rank lower than their metropolitan counterparts.[20] For example, the National Assessment of Educational Progress indicates that rural children score significantly lower than the U.S. average in almost every subject area (see Table 3).[21]

Nevertheless, it is inaccurate to portray rural schools strictly in negative terms. Among the very diverse rural systems are many rural schools which compare favorably in terms of educational quality with their larger and wealthier urban and suburban counterparts. The broad statistics mask these successes and tend to divert researchers away from studying the characteristics of outstanding small schools.

Still, attainment statistics are not particularly helpful in ascertaining the unique qualities of rural education. Since the attainment data for central city schools are similar to that for rural schools, it may only confirm that socio-economic factors (like parents' income and education) which tend to be markedly lower in both rural communities and central cities, are powerful

TABLE 3

NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS TEST SCORES, BY AGE, SUBJECT, AND SELECTED PARTICIPANTS, 1969-73

Subject Area	9-Year-Olds Test Scores			13-Year-Olds Test Scores			17-Year-Old Test Score		
	U.S. Median	High Metro (Difference from U.S. Median)	Extreme Rural (Difference from U.S. Median)	U.S. Median	High Metro (Difference from U.S. Median)	Extreme Rural (Difference from U.S. Median)	U.S. Median	High Metro (Difference from U.S	Ex
Science	63.2	+7.2	-6.3	58.3	+6.2	-6.2	47.0	+5.1	
Writing	28.3	+5.8	-4.6	55.4	+7.5	-6.3	62.5	+6.6	
Citizenship	64.1	+3.4	-3.3	63.1	+4.3	-4.3	61.8	+5.3	
Reading	70.4	+8.4	-4.4	68.1	+5.6	-3.9	77.5	+5.6	
Literature	43.9	+7.5	-3.6	53.4	+5.5	-3.1	61.3	+5.3	
Music	58.8	+5.5	-2.7	48.9	+3.4	-1.4	49.2	+3.5	
Social Studies	72.2	+6.7	-2.8	66.2	+7.3	-2.6	73.8	+6.5	
Mathematics	36.7	+8.1	-3.6	51.3	+10.2	-2.1	57.1	+9.9	

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, Digest of Ed Statistics, 1975.

NOTE: The terms "High Metropolitan" and "Extreme Rural" are the creation of the National Assessment of Educatio Progress. Because they incorporate employment and income distinctions as well as geographic ones, it is difficult to determine the extent to which achievement differences are a function of socio-economic statu or a function of locale. For example, children classified as "low metropolitan" score even lower than th "extreme rural" population in NAEP data.

TABLE 3

L ASSESSMENT OF EDUCATIONAL PROGRESS TEST SCORES, BY AGE,
SUBJECT, AND SELECTED PARTICIPANTS, 1969-73

r-Olds Scores		13-Year-Olds Test Scores			17-Year-Olds Test Scores	
Extreme Rural	U.S.	High Metro	Extreme Rural	U.S.	High Metro	Extreme Rural
om U.S. Median)	Median	(Difference from U.S. Median)		Median	(Difference from U.S. Median)	
-6.3	58.3	+6.2	-6.2	47.0	+5.1	-3.6
-4.6	55.4	+7.5	-6.3	62.5	+6.6	-4.1
-3.3	63.1	+4.3	-4.3	61.8	+5.3	-4.8
-4.4	68.1	+5.6	-3.9	77.5	+5.6	-2.6
-3.6	53.4	+5.5	-3.1	61.3	+5.3	-2.4
-2.7	48.9	+3.4	-1.4	49.2	+3.5	-1.3
-2.8	66.2	+7.3	-2.6	73.8	+6.5	-2.1
-3.6	51.3	+10.2	-2.1	57.1	+9.9	-4.1

Education, and Welfare, National Center for Education Statistics, Digest of Education

an" and "Extreme Rural" are the creation of the National Assessment of Educational
corporate employment and income distinctions as well as geographic ones, it is
extent to which achievement differences are a function of socio-economic status
For example, children classified as "low metropolitan" score even lower than the
in NAEP data.

determinants of student achievement everywhere.

Much of what is unique about rural schools and school districts defies quantitative analysis or statistical description. The slower pace and less pressured environment, the spirit of cooperation, the opportunities for leadership development, the less formal interactions among students, staff, and parents, and other similar qualities which have long been associated with rural schools are not easily measured by the tools of educational research. This would be of little consequence were it not for the fact that researchers and policymakers have tended to discount that which they cannot measure. Thus, when rural communities opt for these "intangible" qualities (for example, by choosing to keep their community school instead of busing their children to a large consolidated school having a bigger library or more sophisticated equipment) they are often labeled as "deficient" rather than merely different.

Efforts to reform education in sparsely populated areas must capitalize upon the strengths, as well as correct the deficiencies, of rural schools. Historically, reformers have either disparaged the advantages inherent to small rural community schools, or have taken them for granted. As a result, these advantages have often remained as undeveloped potentials rather than fully-utilized components of the school program.

Rural schools can be as excellent and productive as schools anywhere in the nation. However, such excellence will not occur by default, but rather by deliberate actions aimed at building upon what they have, as well as providing for what they lack.

II. SCHOOL AND DISTRICT ORGANIZATION IN RURAL AMERICA

Current Status

It has long been understood that schools tend to reflect the society around them. Thus, it should not be surprising to discover that the patterns of rural school and district organization which have emerged since the turn of the century mirror some of the most distinctive characteristics of rural America as a whole. Although many such parallels could be unearthed, the emphasis here will be on two of the most important shared characteristics: diversity and size.

As the previous chapter indicated, diversity is a hallmark of rural America. Whether measured on the basis of ethnicity, occupational profiles, environmental characteristics, socio-economic status, political attitudes, or overall quality of life, rural America is a model of heterogeneity. So too, the way in which rural educational services and institutions are organized varies enormously from state to state.

In terms of school district organization, the precedents seem endless. Hawaii has one school district which encompasses the entire state, while Nebraska has 1,374 districts.[1] Most of the southern and border states have school districts which are co-terminous with counties, whereas most northeastern and midwestern states have districts which are organized into town or other sub-county units. Alaska maintains three wholly separate groups of school districts (city and borough, regional education attendance area, and Bureau of Indian Affairs) and Vermont contains seven legally distinct district types.

In terms of geographic area, there are rural school districts on tiny bits of land (such as small islands) and others which cover several hundred

square miles. Some rural school districts have thousands of pupils and a dozen or more schools, while other rural districts operate no schools and pay tuition for their pupils to attend school in neighboring communities. Many rural school districts are organized to provide comprehensive educational programs from kindergarten through senior high school, but a significant proportion of rural school districts operate only elementary schools or only high schools, or, occasionally, only vocational or other specialized schools. Figures 1, 2 and 3 (while based on non-metropolitan rather than exclusively rural data) are illustrative of the overwhelming diversity found among America's 11,963 non-metropolitan school districts.[2]

America has more than 39,000 public schools located in non-metropolitan communities.[3] As might be expected, these schools also exhibit highly idiosyncratic organizational patterns. For example, while there are thousands of rural schools which serve all the children of a few isolated families, there are thousands more which serve only the secondary school students drawn from several towns, and even some specialized schools which serve a multi-county region. There are one-teacher rural schools which appear to have changed little from their counterparts at the turn of the century, and there are rural schools which are indistinguishable, in every outward respect, from the most modern suburban facilities.

Lots of rural schools offer a kindergarten program, but a surprisingly large number do not, And, while it is common to find rural schools organized into traditional elementary, junior high, and senior high school arrangements, it is by no means unusual to find rural schools which either offer all grade levels in a single facility or offer seemingly random sequences of three or more grades (e.g., K-3, 4-6, 1-5, 2-4, etc.).

These divergent patterns do not appear to be a function of regional

Figure 1

U.S. Non-Metropolitan School Districts, by Enrollment Size, 1972

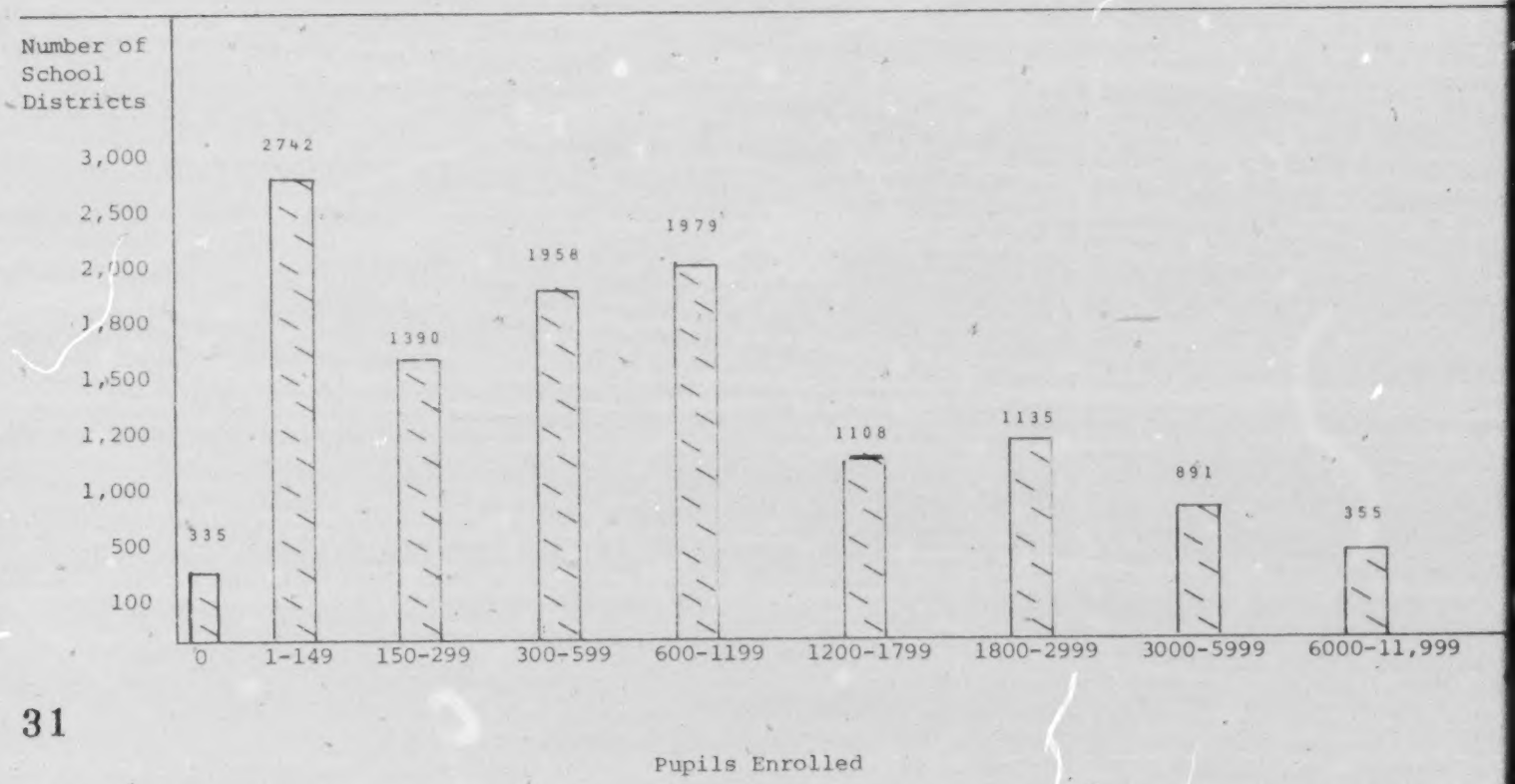


Figure 1

ropolitan School Districts, by Enrolment Size, 1972

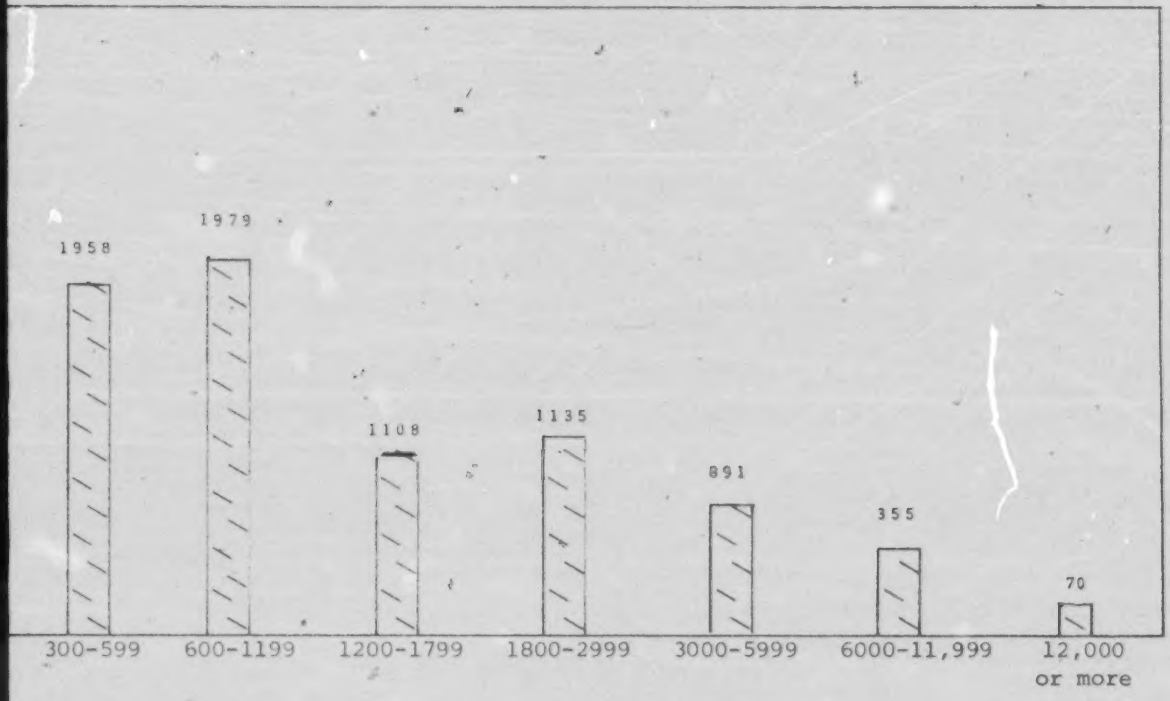


Figure 2

U.S. Non-Metropolitan School Districts, by Number of Schools Operated, 1972

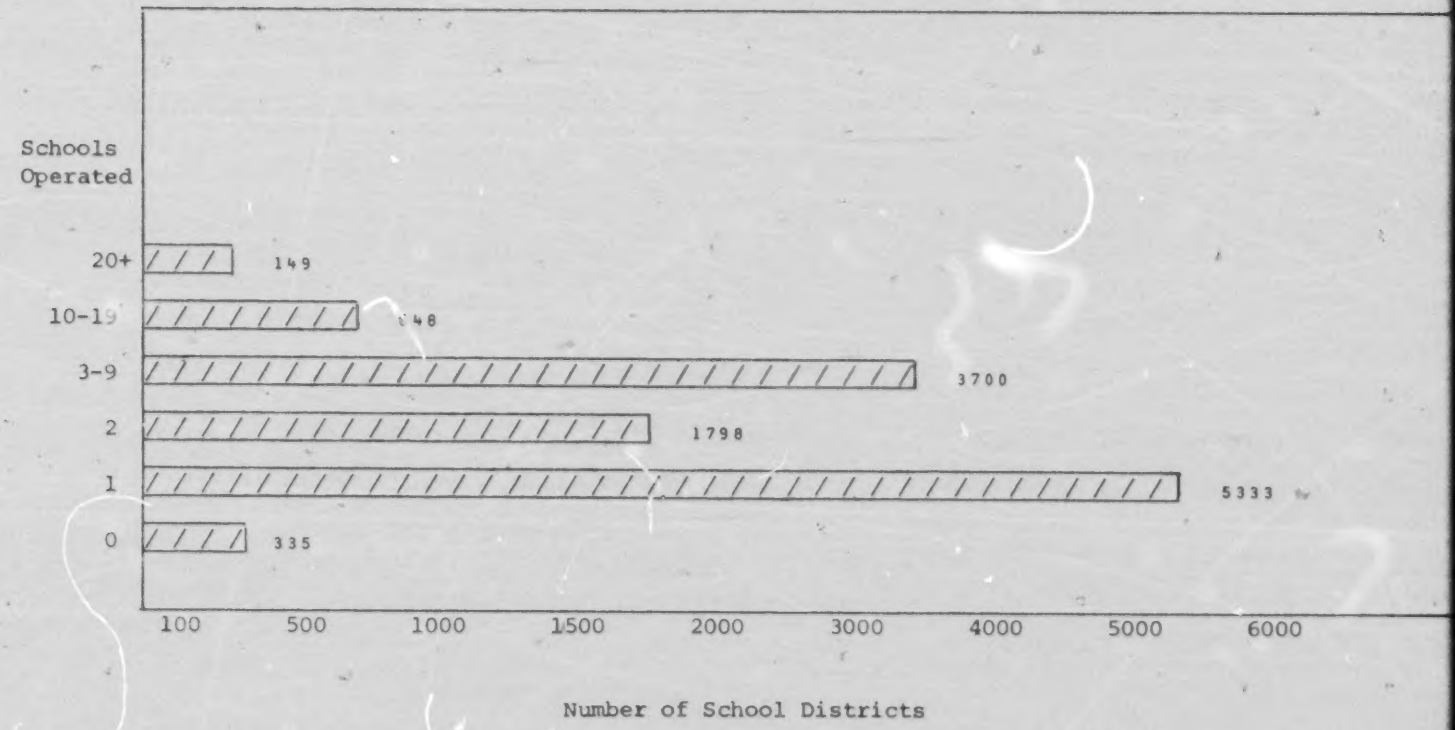
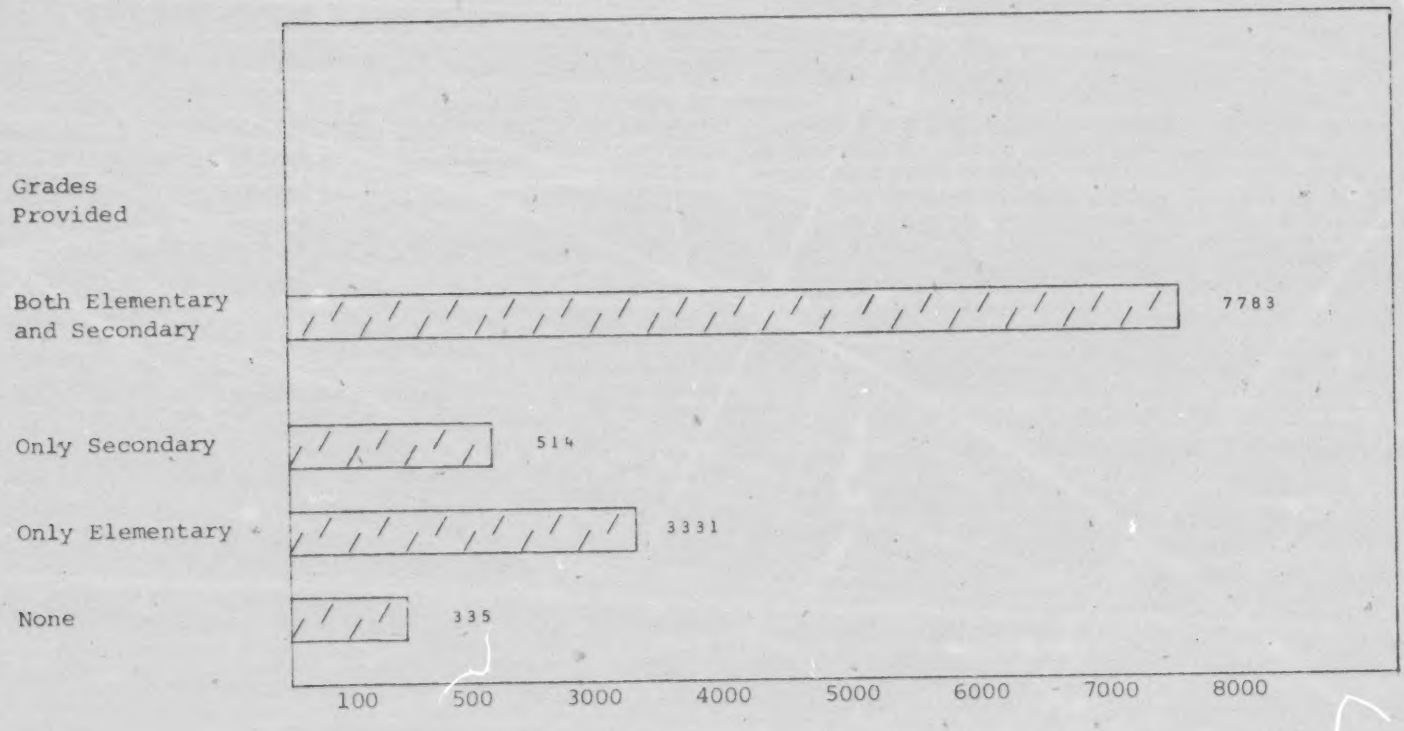


Figure 3

U.S. Non-Metropolitan School Districts, by Grades Provided, 1972



differences, district size, community wealth, or any other known variable. Rather, they seem to be the result of tradition, geographic circumstance, political considerations, availability of teachers, and other essentially local factors.

Still, variability is not the only characteristic shared by rural schools and rural America as a whole. Another key attribute common to both is their relatively limited size and small-scale of operations. Even after more than fifty years of consolidation efforts, rural schools and school districts remain far smaller than their urban and suburban counterparts (see Table 1). For example, non-metropolitan school districts in Nebraska have an average enrollment which is less than 5 percent of the average enrollment of metropolitan districts in that state (see Table 2).

Two facts should be remembered in reading these two tables. First, since "non-metropolitan" includes places up to a population of 50,000, the size differences between city schools and districts and very rural ones are significantly underestimated. Second, because of a lack of available data, these tables do not distinguish between elementary and secondary school size. A more sophisticated presentation of the data would probably show high school size to be somewhat larger and elementary school size somewhat smaller than the averages appearing in these tables.

One related point warrants attention. Occasionally, it is asserted that rural school arguments are just small-school arguments, and that the problems and potentials of rural education have equal applicability in small, community controlled schools, no matter where they are located. While this statement is not completely false, there are two facts which seriously compromise its validity.

First, rural schools, unlike small schools elsewhere, must contend

TABLE 1

SIZE OF PUBLIC SCHOOLS AND SCHOOL DISTRICTS IN METROPOLITAN AND NON-METROPOLITAN AREAS OF THE UNITED STATES, 1971-72

Area	Total Enrollment (K-12)	Percentage of Total U.S. Enrollment	Number of School Districts	Average School District Enrollment	Number of Schools	E
All Metropolitan Areas of the U.S.	30,408,000	66%	4,781	6,360	47,849	
All Non-Metropolitan Areas of the U.S.	15,615,000	34%	11,800	1,323	39,544	
U.S. Total	46,023,000	--	16,581	2,776	87,393	

SOURCE: U.S. Bureau of the Census, 1972 Census of Governments: Governmental Organization (Vol. 1) (Washingto U.S. Government Printing Office, July 1973), Table 17; also U.S. Department of Health, Education and W Statistics of Local Public School Systems, Pupils, and Staff, Fall 1971, National Center for Education Statistics (Washington, D.C.: U.S. Government Printing Office, 1975), Table A.

TABLE 1

OF PUBLIC SCHOOLS AND SCHOOL DISTRICTS IN
ROPOLITAN AND NON-METROPOLITAN AREAS OF THE
UNITED STATES, 1971-72

Total nrollment (K-12)	Percentage of Total U.S. Enrollment	Number of School Districts	Average School District Enrollment	Number of Schools	Average School Enrollment
0,408,000	66%	4,781	6,360	47,849	635
5,615,000	34%	11,800	1,323	39,544	395
6,023,000	--	16,581	2,776	87,393	527

72 Census of Governments: Governmental Organization (Vol. 1) (Washington, D.C.: ce, July 1973), Table 17; also U.S. Department of Health, Education and Welfare, chool Systems, Pupils, and Staff, Fall 1971, National Center for Educational U.S. Government Printing Office, 1975), Table A.

TABLE 2

SIZE OF PUBLIC SCHOOLS AND SCHOOL DISTRICTS IN SELECTED AREAS OF TEN STATES, 1971-72

Area	Total Enrollment (K-12)	Number of School Districts	Average School District Enrollment	Number of Schools	Average School Enrollment
San Francisco	80,796	1	80,796	127	636
California (Metro)	4,536,458	654	6,936	6,110	654
California (Non-Metro)	344,111	411	837	976	352
Denver	94,838	1	94,838	118	803
Colorado (Metro)	402,705	35	11,505	600	671
Colorado (Non-Metro)	163,804	146	1,122	517	317
District of Columbia (All Metropolitan)	140,959	1	140,959	200	705
Hawaii (All Metropolitan)	183,083	1	183,083	211	868
Omaha (Douglas County)	85,112	16	5,320	147	579
Nebraska (Metro)	139,304	45	3,096	262	532
Nebraska (Non-Metro)	192,232	1,329	145	1,592	121
New York City	1,149,068	1	1,149,068	897	1,281
New York (Metro)	2,990,033	439	6,811	3,507	853
New York (Non-Metro)	530,280	341	1,555	940	564
Philadelphia	292,741	1	292,741	275	1,065
Pennyslvania (Metro)	1,828,691	343	5,331	3,103	589
Pennsylvania (Non-Metro)	521,529	176	2,963	1,225	425
Dallas (Dallas County)	299,234	16	18,702	358	836
Texas (Metro)	2,040,497	364	5,606	2,946	693
Texas (Non-Metro)	667,320	772	864	1,973	338
Vermont (All Non-Metro)	103,475	272	380	440	235
Wyoming (All Non-Metro)	85,977	70	1,228	375	229

SOURCE: U.S. Bureau of the Census, 1972 Census of Governments: Governmental Organization (Vol. 1) (Washin
D.C.: U.S. Government Printing Office, July 1973), Tables 17 and 19.

TABLE 2

OOLS AND SCHOOL DISTRICTS IN SELECTED AREAS OF TEN STATES, 1971-72

otal ollment K-12)	Number of School Districts	Average School District Enrollment	Number of Schools	Average School Enrollment
30,796	1	80,796	127	636
36,458	654	6,936	6,110	654
44,111	411	837	976	352
94,838	1	94,838	118	803
02,705	35	11,505	600	671
63,804	146	1,122	517	317
40,959	1	140,959	200	705
83,083	1	183,083	211	868
85,112	16	5,320	147	579
89,304	45	3,096	262	532
92,232	1,329	145	1,592	121
49,068	1	1,149,068	897	1,281
90,033	439	6,811	3,507	853
90,280	341	1,555	940	564
92,741	1	292,741	275	1,065
18,691	343	5,331	3,103	589
81,529	176	2,963	1,225	425
99,234	16	18,702	358	836
10,497	364	5,606	2,946	693
67,320	772	864	1,973	338
13,475	272	380	440	235
85,977	70	1,228	375	229

nsus, 1972 Census of Governments: Governmental Organization (Vol. 1) (Washington, t Printing Office, July 1973), Tables 17 and 19.

27

with unique problems of sparsity and isolation. This implies more than simply overcoming difficulties caused by geography or distance. It also refers to the fact that rural schools tend to be isolated from the educational, governmental, and economic support systems found in metropolitan areas. It also means that sources of assistance to rural schools (from universities, mental health centers, teacher centers, cultural institutions, and other potential allies) are notably absent in most regions.

Second, small public schools and school districts have become increasingly rare in America's metropolitan centers. Urban schools and districts have always been bigger than rural ones, but this gap is growing even greater as declining enrollments in the cities and suburbs have caused remaining small schools to be shut down. Thus, in the near future, small-school issues (at least in the public domain) will be almost exclusively rural, for that will be the only place in which more than a handful of such schools will continue to exist.

Changes in Rural School and District Organization

No rural education issue has been as long-lived or volatile as the reform of school and district organization. Beginning in the middle of the nineteenth century with Horace Mann's advocacy of rural school consolidation and continuing unabated even today, proposed reforms of the ways in which educational services and institutions in rural areas are organized have sparked widespread controversy and dissension.[9]

As a general rule, rural school consolidation and district reorganization have been supported by influential leaders and policymakers in the education and business worlds. Informal coalitions of liberal reformers, professional education associations, state education agencies, urban-oriented business organizations, and leading management experts emerged in most states to champion the

cause of bigger schools and bigger districts in rural areas.

The results achieved by these pro-consolidation forces is a testimony to their power and effectiveness. Nearly every state has enacted legislation which either mandates or encourages (usually through financial incentives) some degree of consolidation and reorganization in rural school systems. Local action usually (though not always swiftly) conformed to this legislative intent. In fact, rural school and district consolidation ranks as one of the most successfully implemented educational reforms of the past fifty years. Table 3 reveals the pervasiveness of this reform movement.

TABLE 3

NUMBER OF PUBLIC SCHOOLS AND SCHOOL DISTRICTS, 1930-1972

Year	School Districts	Elementary Schools (Total)	Elementary Schools (1-Teacher)	High Schools (4-Year)
1930	128,000	238,000	149,000	16,500
1940	117,000	185,000	114,000	15,000
1950	84,000	128,000	60,000	10,400
1960	40,000	92,000	20,000	6,000
1970	18,000	66,000	2,000	6,500
1972	16,960	64,945	1,475	--

SOURCE: Digest of Educational Statistics (Washington, D.C.: U.S. Office of Education, National Center for Educational Statistics, 1974). Figures prior to 1972 have been rounded.

Opposition to these reforms was (and continues to be) both widespread and adamant. In most states, the opponents--an eclectic collection of rural parents, taxpayers, community leaders, fiscal conservatives, libertarians, local educators and urban expatriates--were both very vocal in their criticims of consolidation and fiercely dedicated to the preservation of their small community schools.

Ironically, the rural school consolidation and reorganization movement has been opposed most vehemently by the groups on whom such reforms would have

the greatest effect and supported most strongly by groups on whom the direct effects would be minimal. In this sense, rural school consolidation in the United States is a classic example of an externally instigated and imposed reform; that is, one which is done to communities rather than by them.

At best, the anti-consolidation forces were only sporadically successful. No state rebuffed consolidation and reorganization entirely and only a comparative handful, such as Nebraska, Vermont, Montana, Texas, Michigan, South Dakota, Minnesota, and Iowa avoided uniform implementation of these reforms. Thus, the net effect of the opposition forces nationwide appears to be one of delaying or tempering the trend toward consolidation rather than preventing it.

The case of Illinois is illustrative. In 1972, Illinois had 1,177 public school districts and ranked second among all states in the number of existing districts. Thus, on the surface, it would appear that the anti-consolidation forces in this state had prevented widespread organizational reforms. However, as recently as 1945, Illinois had approximately 11,000 public school districts. By 1955 (after passage of semi-permissive consolidation legislation known as the Illinois School Survey Act), the number of school districts in Illinois had been reduced to just over 2,000. And, while the consolidation of 9,000 school districts in one state in one decade is amazing, it merely mirrored a burgeoning national trend. In Illinois, as in most other states, neither the consolidators nor their opponents entirely reached their goals. But, on balance, it seems clear that the reformers were more successful and influential.

Organization as a Technical Issue

Over the years, educational policymakers and researchers have strived to behave as if consolidation and reorganization were strictly technical issues.

Heavy emphasis was placed on demonstrating that these reforms would result in more economical and efficient schools in rural areas. Study after study was undertaken to show that educational inputs (e.g., teacher credentials, course offerings, school facilities, available equipment, and specialized services) were all expanded and/or improved as a result of school and district consolidation. The inference was repeatedly made that these upgraded inputs would lead to greater success not only in college, but in the student's adult life as well. In short, leading educators (particularly at the state and national levels) argued that their studies and research on the technical aspects of consolidation proved that bigger schools and bigger school districts were inherently better ones.

In 1976, a critical analysis of the literature on this topic, entitled Economy, Efficiency and Equality: The Myths of Rural School and District Consolidation was published by the National Institute of Education.[6] Basically, this report attempted to show that the technical information used to justify consolidation was severely flawed and unreliable. More specifically, this report stated that:

> Given the enthusiasm with which consolidation was advocated, one would expect the empirical evidence supporting this policy to be overwhelming. It is not. The evidence on consolidation is incomplete. Most of the research not only fails to document the alleged benefits of consolidation, but also fails to acknowledge potential liabilities or problems. With rare exceptions, this body of research is methodologically unsound, with almost every study open to criticisms severe and significant enough to make the findings extremely suspect. The conclusions are, at best, inconclusive, and, at worst, simply incorrect. In short, there is no strong empirical base to support the assumptions and assertions of school and district consolidation advocates.

Clearly, consolidation was a useful and beneficial reform in some rural communities. As a result of the consolidation movement, most of the grossly inadequate rural schools in the United States were closed, and schools which previously had very little in terms of specialized curricular offerings

or sophisticated resources were able to upgrade their programs. Occasionally, consolidation even brought some cost savings and increased efficiency.

However, it is also clear that in at least an equal number of situations, consolidation's benefits were illusory. Many rural communities were forced to send their children long distances to attend consolidated schools which were no better than the community schools they replaced. In addition, consolidation occurred in thousands of communities in which such a drastic reform was neither appropriate nor necessary. Often, the values of smallness were lost in the process of consolidation and rural communities received little (educationally or economically) in return.

In the final analysis, though, local circumstance was probably the key determinant of the relative economic and educational merits, not only of one-teacher versus consolidated schools, but also of the consolidation process at all levels of implementation. In communities having four ramshackle one-teacher schools with an ill-prepared teacher and an average enrollment of less than ten pupils, all located within a ten-square mile area, school consolidation was probably a propitious strategy. However, in communities having four well-maintained, one-teacher schools with an excellent teacher and an average enrollment of approximately twenty students, all spread out over a fifty-square mile area, school consolidation was probably devoid of any economic or educational justification.

Organization as a Political Issue

Still, it must be remembered that the divisive struggles and intense controveries engendered by school and district consolidation occurred not because of transportation costs, or administrative inefficiencies or curricular offerings, or any other technical concerns. Rather, it was (and still is) the battleground on which larger questions of values and control have traditionally

been fought out in rural areas.

Rural parents and taxpayers may be dissatisfied with their schools, but they are adamant in asserting their ability, and right, to control these schools. Similarly, many rural people valued having a school in the community more than they valued the resources educators associated with consolidation. Thus, consolidation is essentially a political issue, rather than an educational or economic one, for it always involves a choice among values, not simply a choice among "objective" facts.

On the basis of our current knowledge and understanding, six conclusions seem evident:

1. That "good" schools and "bad" schools (however defined) come in all sizes. Educational improvement and economic efficiency are the real challenges, and schools of every size could benefit from efforts in this direction. However, there is simply no basis for the belief that making a school (or district) bigger is likely to make it better.

2. After more than thirty years of experience with school and district consolidation, it is clear that consolidation has not lived up to the claims made by its supporters. By and large, the benefits have been exaggerated and the liabilities simply ignored.

3. While some schools and districts can benefit economically or educationally by consolidating, such places are a distinct minority and are becoming increasingly rare. In most cases, it is far more sensible to devise creative ways of bringing resources to children rather than forcing children to go long distances for these resources. However, in all cases, local circumstance should be the key determinant of consolidation's merits.

4. Any decision about consolidation involves trade-offs. To some individuals, getting what big schools and districts can offer (e.g., more equipment, more specialists, etc.) are worth the costs (e.g., loss of a community institution, more transportation, reduced participation in school and extra-curricular activities, etc.). To other individuals, the benefits are not worth what must be given up to get them.

5. The decision to consolidate should not be made hastily or without careful consideration of its likely effects. Unlike most educational decisions (for example, the choice of textbooks), consolidation is almost irreversible. Once old schools have been closed, new ones built, and new buses and equipment purchased, it is very

difficult to go back to the way things were, even if consolidation doesn't work out well.

6. Alternatives to consolidation and reorganization should be encourage and developed. Regionalizing such expensive programs as vocational education is one alternative to consolidating entire schools and districts. A range of helpful services can (and in some states are) being provided by regional units (such as BOCES in New York, area education agencies in Iowa, and regional education service centers in Texas) to schools and districts desirous of remaining small.

Other alternatives include the use of advanced educational technologies (such as satellites, cable television, videotape, and computer systems) the establishment of a teacher corps system using special subject teachers, paraprofessionals, teaching assistants, and tutors to compensate for educational deficits in rural communities, or the establishment of voluntary collaboratives for special interest activities. The underlying premise is that resources can be brought to children, rather than forcing children to go long distances to get to these resources. The benefits of smallness can be coupled with the benefits of specialization.

III. FINANCING AMERICA'S RURAL SCHOOLS

Introduction

Financing public schools in sparsely populated areas of the United States has long been a vexing problem for both parents and policymakers. While there are some rural communities (for example, those with a utility plant or very productive farmland) in which it is relatively easy to generate very substantial financial resources locally, such places are relatively rare. It is far more common to find rural communities which are either "property rich but income poor" or which have an economic base that is inadequate to support the public schools from local sources of revenue.

It has commonly been assumed that rural schools, unless consolidated, could not be either economical or cost-effective. Even though mass communications and transportation has modernized much of rural America, schools in sparsely settled areas are still associated with (sometimes correctly) underpaid teachers, antiquated equipment, and uneconomical class, school, and district size. Yet, federal and state level educators are obligated to assist all schools, even these small rural institutions. Historically, this assistance has proceeded in two, often conflicting, directions. First, states have offered incentive funds in order to encourage rural compliance with centralization policies. However, the second, more recent, type of assistance is compensatory support given to counterbalance the assumed diseconomies of sparsity.

This section will describe the financial characteristics of schools in sparsely settled areas and identify fiscal problems associated with isolation. It will examine what selected states are doing to balance urban-rural differences. The first part will focus on the generation of revenue; the next part will

describe the distribution of state and federal dollars to sparsely settled areas and some methods developed to correct for specific needs of isolated schools. The third part will be a discussion of the allocation of school resources within districts. It is important to note that there is no consistent national policy regarding the financing of schools. Education is an official state function guaranteed by individual states' constitutions rather than by the federal constitution. Consequently, the methods for financing schools vary from state to state depending on both the needs and characteristics of the state and the strength of various interest groups.

History

The current school finance system in the United States has evolved through a series of distinctive stages. The first stage occurred almost concurrently with the establishment of public education. State aid to schools began in 1834 in the state of Massachusetts. Although almost insignificant in its contribution to the cost of education, it helped legitimate the principle that education was a state function and responsibility. Money was distributed to schools if, and only if, they agreed to meet specific requirements, including submitting statistical reports to the state. Thus, as a condition of state aid, even the remote rural schools were brought under the umbrella of the state. By the end of the nineteenth century, the state was firmly entrenched in its position as the guarantor of education to every child. Growing state aid was accompanied by growing state legislation establishing or requiring educational guidelines and standards. The purpose of state aid was quite explicit: according to the report of the Secretary of Education in Massachusetts in 1894, state aid "enables the authorities to extend the school laws and to establish a united system of schools throughout the Commonwealth."[1]

Throughout the first half of the twentieth century, with the development

of the junior high school and the comprehensive high school, schools both grew in importance and became more costly. As American cities grew, many attempts were made to bring urban ways to the country and to extend the privileges of urban education to the remote rural areas. As schools grew more sophisticated and more specialized, it was assumed that larger numbers of students were needed to justify the increased overhead costs. State financial aid also grew during this period. Its purpose was to ensure that every community could offer at least a minimal basic education. Equality among schools was, at best, a secondary concern. State aid was often offered to encourage consolidation and specialization as a way of "modernizing" rural school systems. As the Superintendent of the rural, agricultural state of Vermont reported in 1900, "consolidation is a natural sequence to the evolution of the modern industrial system. . . ."

In the next and most recent phase of school finance reform, policy initiatives have gone beyond minimums toward the more lofty goal of equity. In the 1960s, the emerging battle over equality of education exploded into a series of court challenges across the nation--over equity among taxpayers, equity among school districts, and equity among students. Justice, reformers argue, is not possible without first ensuring greater equality of educational resources. This is where the politics of school finance stands today: working toward some standard of fairness, whether it is defined as fiscal neutrality or equalized expenditures or compensatory inputs.

Sources of Revenue

Since the financing of American schools has been traditionally the responsibility of individual communities, the majority of the costs have been borne by the local school district. Only in recent years has the combined state and federal contribution to school expenditures risen to equal the local

share (see Table 1). In 1976, about 49 percent of school funds were raised locally (usually via a locally established tax rate on assessed property value), 42 percent was contributed by the state, and 9 percent was paid by the federal government.[3] The assumptions underlying the three sources of revenue are quite different. Local revenue is determined by what educational services the community feels it needs and wants, constrained by their financial resources and weighed against competing social services. Communities in sparsely settled areas may not have as many competing social services as do the cities, but they also do not have access to the industrial wealth of urban areas. State revenue is determined by what the state wants within similar constraints, to ensure minimal acceptable levels of education for all children, and to attempt to equalize the educational resources across all districts in the state. Federal funds, unlike most local and state funds, are usually targeted for special populations or specific purposes and are not meant to be equalizing in absolute dollar terms. They are allocated to compensate for special needs, handicaps, and cultural disadvantages and are thus more restricted in their use.

TABLE 1

FEDERAL, STATE, AND LOCAL SHARES OF EDUCATIONAL REVENUE IN THE UNITED STATES, 1919-1976

Year	% Local Share	% State Share	% Federal Share
1919-20	83.2	16.5	0.3
1929-30	82.7	16.9	0.4
1939-40	68.0	30.3	1.8
1949-50	57.3	39.8	2.9
1959-60	56.5	39.1	4.4
1969-70	52.1	39.9	8.0
1976-77	48.6	42.5	8.9

National averages, however, do not accurately describe the financing of American education, and it is difficult to generalize from them. There are as

many methods for financing schools as there are states. Local support varies from zero in the centralized educational system of Hawaii, to nearly 90 percent in New Hampshire with its strong New England tradition of local autonomy. Federal support varies from 23% in Mississippi, with its high concentration of rural poverty, to less than 4 percent in New Hampshire, Michigan, and Connecticut. The tendency in all states is toward increased state support. Yet the costs of education have risen more rapidly than the available aid. Vermont's state aid, for example, has increased in actual dollars, but decreased relatively from 38 percent of the budget in 1968, to 22 percent in 1976.

Within the local share, the bulk of the money is raised by taxing the assessed value of real property. There are a number of problems in trying to achieve equity through the property tax. First, the property tax has been shown to be inherently regressive. Although recent state circuit breakers (state income tax deductions) have tended to ameliorate the problem, the poor are still forced to pay a greater share of their income than the wealthy[4] (see Table 2).

TABLE 2

PROPERTY TAX AS PERCENTAGE OF INCOME, 1970

Total Family Income	Residential Property Tax Burden
Under $2000	16.6%
$2000 - $3000	9.7
$3000 - $4000	7.7
$4000 - $5000	6.4
$5000 - $6000	5.5
$6000 - $7000	4.7
$7000 - $10,000	4.2
$10,000 - $15,000	3.7
$15,000 - $25,000	3.3
Over $25,000	2.9

Secondly, property tax tends to be less elastic than the economy and

thus less sensitive to changes in the value of the dollar. Most importantly for the purpose of this paper, however, are problems endemic to sparsely settled areas, such as:

1. Disproportionate property wealth of rural landowners compared to their income or liquid assets

2. Difficulty in assessing non-residential land on an equalized statewide basis due to low turnover of property on which to base market values and to inequalities between potential value and use value

3. Poor administration of assessment practices and lack of proper training of assessors

The use of the property tax as the basis for supporting schools has been predicated on the assumption that real property accurately reflects wealth. Recent studies in many states have questioned this assumption and, in some instances, disproved it. The relationship in rural areas is especially confusing because rapidly rising land values based on some potential value rather than current use value inflate estimates of wealth. Landowners are forced to sell their land (and thus, their means of livelihood) in order to capitalize on the investment. Data on this point for four states are shown in Table 3.[5]

TABLE 3

TAX AND FINANCIAL DATA FOR SELECTED AREAS OF FOUR STATES, 1975.

	Tax Rate	Average Assessed Value/Pupil	Median Family Income	Current Expenditure Per Pupil
MISSOURI				
Large Cities	2.34	23,365	8,673	1,209
Suburbs	2.42	18,450	10,163	1,074
Non-Metro	1.61	22,468	6,339	986
SOUTH DAKOTA				
Large Cities	49.93	14,133	9.088	875
Suburbs	40.07	13,602	8,234	908
Non-Metro	37.65	17,986	6,658	1,065
COLORADO				
Large Cities	29.9	17,369	9,367	1,184
Suburbs	30.3	13,077	10,253	1,129
Non-Metro	27.0	23,076	7,381	1,196

TABLE 3

(continued)

	Tax Rate	Average Assessed Value/Pupil	Median Family Income	Current Expenditure Per Pupil
WASHINGTON				
Large Cities	10.7	35,643	10,125	1,059
Suburbs	11.7	24,157	10,992	901
Non-Metro	6.5	29,683	9,112	888

The figures show that the median income for non-metropolitan residents is lower than for either suburban or urban residents, yet in each state the average assessed valuation of the same population is either highest or second highest. If the non-metropolitan averages were limited to rural residents (non-metropolitan includes small cities) an even more dramatic difference would be expected. A 1977 study of taxes in Vermont concluded that the average farmer pays $200 of property tax for each $1000 of income earned while the average non-farm resident pays only $29 for each $1000 of income earned.[6] Even conceding that there are additional non-cash benefits accruing to farmers, the difference is dramatic. Tables 4 and 5 show the relationship between school district size, assessed valuation, and income for Colorado[7] and for Vermont.[8] For the purpose of this comparison, size is assumed to roughly correspond to population density. Basically, the data shows that the smaller the enrollment of the district, the greater the assessed valuation per pupil and the lower the income per pupil.

The effect of sparsity is shown directly for South Dakota in Table 6.[9] The most densely populated districts have the lowest assessed value and the highest income. Although it appears that in the very sparsely settled areas the income is higher, it may be due to a few wealthy large ranchers. In addition to the inequities this creates between individuals within districts, the

TABLE 4

RELATIONSHIP OF SCHOOL DISTRICT SIZE TO FINANCIAL FACTORS IN COLORADO, 1974

District Size	Assessed Value Per Pupil	Tax Rate	Expenditures Per Pupil	State Aid
0-150	48,527	29.97	1,643	589
151-300	37,334	26.27	1,293	537
301-1000	24,081	27.92	1,058	505
1001-5000	18,533	26.28	1,000	523
Over 5000	13,968	28.45	1,070	638

TABLE 5

RELATIONSHIP OF SCHOOL DISTRICT SIZE TO FINANCIAL FACTORS IN VERMONT, 1976

Quintile	School District Size	Assessed Value Per Pupil	Expenditures Per Pupil	State Aid Per Pupil	Income Per Student
1	174	980	1,012	167	10,493
2	479	489	1,135	292	11,796
3	830	425	1,035	380	12,252
4	1,802	395	1,100	391	15,226
5	3,728	463	1,240	328	16,573

TABLE 6

RELATIONSHIP OF SPARSITY TO FINANCIAL FACTORS IN SOUTH DAKOTA, 1975

Quintile of Sparsity	ADM Sq. Mi.	Average Assessed Value	Median Income	Exp./ Pupil	State Aid	Federal Aid
1	0.52	25,017	6,891	1,084	223	164
2	1.09	18,224	6,453	970	214	132
3	1.70	16,764	6,461	960	224	69
4	2.68	15,198	6,301	906	209	83
5	14.70	13,405	7,712	826	201	81
	4.14	17,722	6,764	949		

unfairness is exacerbated by the fact that most state aid formulas distribute money according to some measure of property wealth. The rural areas with high assessed value and low income get proportionately less state aid, even though they may already be more heavily burdened by school taxes.

Reforms have been introduced in various states in recent years to offset the unfair burden of property tax on low income landowners, and to resolve discrepancies between potential value and use value of non-residential land. The most common solution to the problem of regressivity is a property tax rebate for specified categories of residents--in most cases the elderly, the poor, and the disabled. Twenty-eight states offer some form of tax relief. Another modification to handle the second form of inequity is a differential assessment rate. Land that is sparsely settled and that produces little income, such as forest land and some agricultural land, is assessed at a reduced percentage of market value. Minnesota and South Carolina, for example, assess agricultural property at lower rates than residential property and there are presently bills pending before other state legislatures to do the same.

In a system full of complications and inequities, problems are made even more difficult by the fact that persons responsible for assessing rural land are often untrained townspeople, chosen or elected out of patronage or friendship rather than specific skills. The position of town or county listor or assessor is a highly political position affecting the wealth of the entire area. Listors sometimes attempt to correct for inequities by undervaluing property and statewide standards are difficult to maintain in decentralized states with hundreds of independent school districts.

Distribution

Since education in America is a state, rather than federal, responsibility, the bulk of government assistance comes from the state. The state's share of

school revenue has risen gradually over the years to the 1976-77 figure of 42 percent (see Table 1). Just how the money is distributed to the districts and toward what purpose has changed drastically. Today state aid is allocated primarily to compensate for disparities in wealth in order to achieve equality of opportunity for all children. Whereas aid used to be distributed to districts on a flat grant basis, or according to student population to ensure minimum standards, it is now, in most states, allocated according to formulas based on various measures of district wealth.

Confounding the attempts to reach equity, however, is the fact that there are substantial differences between regions, between communities within regions, and between students within communities. One dollar will not buy as much education in a rural school as it will in an urban school. There are rural cost differences such as lower teacher salaries, but higher costs for special services. There are differences in expenditure patterns due to scale and isolation--e.g., higher transportation and administration costs. There are also differences in needs. Secondary school costs are higher than elementary school costs. Vocational education costs more than "general education" programs. And, one dollar will not provide the same education to a physically or culturally handicapped child that it will to an average student. Some recent state aid reform has been directed toward equalizing according to need, rather than simply according to total dollars provided.

Two means for compensating for differential needs are correction factors--multipliers for distribution formulas that correct for the added costs of providing equal educational opportunity, and special grants--money allocated directly to pay for a specific need above and beyond normal equalization or foundation support. In twenty-five of the fifty states, density of population and/or scale are perceived as special needs and some effort has been made to correct for the differences in both costs and needs. Some of the policies

implemented to deal with sparsity in our rural states will now be described.[10]

- IDAHO combines both sparsity and scale factors. If an elementary school is more than ten miles from another elementary school, or if a secondary school is more than fifteen miles from another secondary school, the average daily attendance (the basis for the state aid) is increased inversely with size. For example, for state aid purposes, an elementary school with between 200 and 299 pupils would be increased by 10% while the enrollment of a school with 50-100 students would be given a multiplier of 25%.

- MONTANA establishes a per-pupil expenditure that varies with school size (e.g., for an elementary school of 50 students, the guaranteed amount would be $836 per pupil, and for a school of 350, it would be $639 per pupil). The state provides what the state-wide property tax does not raise.

- NEBRASKA increases the per-pupil support according to population density, as follows:

Density	Percent State Aid Added
3-4 per quare mile	10%
2-3 per square mile	20%
1-2 per square mile	30%
Less than 1	40%

- NEW MEXICO employes linear formulae for both schools with fewer than 200 students and for districts with fewer than 4,000 students. The add-on is used to increase the attendance figure that is used to calculate state aid. For example, the enrollment multiplier for an elementary school is (1-enrollment/200) and the corresponding multiplier for a district is (1-enrollment/4000) x .15.

- UTAH uses a table to choose the weight given for school size. Assuming that the schools are considered to be necessarily small, assistance is given to compensate for diseconomies of scale.

- COLORADO assigns "bonus pupils" to small attendance centers according to tables established by the state. These centers must be a specified number of miles from other schools to qualify.

- MAINE uses geographic isolation grants to adjust the per pupil allocation to meet the needs of the unit.

In most states, scale and sparsity factors were instituted as a result of local demand or to "buy" the votes of rural legislators needed to pass school finance legislation. Professional school administrators at the state or regional level believe that these sparsity payments are supporting some uneconomical and inefficient small schools and districts. Without the support,

many state administrators feel that small rural districts would be forced to close or to combine with other districts. According to one long-time school finance expert (and proponent of centralization):

> Experience with state formulas that make provision for extra costs due to sparsity has shown that great care should be exercised to avoid providing financial incentives for school districts to maintain unnecessarily small schools.[11]

Conversely, state aid has been used as encouragement for centralization in many states. State aid in the United States is closely intertwined with the degree of centralization and the resulting locus of control of schools.

Federal funds, targeted for specific purposes, give the appearance of national control, but, in reality, have little direct influence on general school policy. Funneled through the state departments of education from a multi-layered bureaucracy, there is little chance for direct control or management. Almost half of the federal funds for elementary and secondary education in 1976 were generated by the Elementary and Secondary Education Act and over 80 percent of that was aid to "disadvantaged" children, using poverty as the measure of deprivation. Much of the money from the disadvantaged section of ESEA goes to non-metropolitan areas. However, a disproportionately low percentage of categorical federal funds available for educational services such as libraries, supplementary education centers, guidenace and counseling, and equipment, is allocated to non-metropolitan areas.[12]

TABLE 7

DISTRIBUTION OF SELECTED FEDERAL EDUCATION FUNDS

	Metropolitan $/Pupil	Non-Metropolitan $/Pupil
Elementary & Secondary Ed. Act:		
Education Deprivation	8.77	20.16
Other Resources	2.75	1.31
Vocational Education	3.86	1.72
Education for the Handicapped	3.22	0.54
Community Services	1.29	0.69
Research & Development	0.72	0.15

Use of School District Resources

Underlying the differences in state aid systems is the assumption that the costs of operating schools in sparsely settled areas are indeed different--usually greater. Some may appear obvious, such as transportation and higher overhead; others are more obscure such as administrative costs that are difficult to isolate due to dual and overlapping roles of administrators, teachers, and school board members. It is often assumed by educators that schools in sparsely settled areas are burdened by diseconomies of scale. As long as educators attempt to apply urban standards and to emulate urban models, that may hold true. The kind of educational facilities that have evolved in the cities and the structure of the system based on a high degree of specialization depend on a concentration of students which is greater than can be mustered in rural communities. Rural schools have been faced either with having to purchase equipment and services which are underutilized, or with transporting students to the resources deemed important by experts. Either solution costs more money at the expense of competing needs.

Within school budgets, the distribution of expenditures varies, but not always as much as expected, nor in ways anticipated. Since data is not categorized according to urban-rural characteristics, a comparison has been approximated using the five most rural states and the five least rural states. Since rural states contain urban areas and vice-versa, the impact has been tempered, but the trends still emerge (see Table 7). It has been charged, for example, that administrative costs in rural states with small schools are excessively high. On examination, the proportion of the budget spent on administration in the five most rural states is 5.1 percent, and the proportion spent in the five least states is 4.4 percent. This is statistically significant, but small in relation to the total budget.

TABLE 8

SELECTED EDUCATION STATISTICS IN THE FIVE MOST URBAN STATES AND THE FIVE MOST RURAL STATES

Rural	Percent Administrative 1975	Average School Size 1975	Per Capita Income 1975	$ Per ADA 1974-75	Teachers Salaries (1000's)	Percentage Bused	$ Per
Mississippi	3.9	582	4,941	834	9.3	61	
North Dakota	5.9	219	5,855	1,032	10.1	41	
South Dakota	5.6	178	4,980	973	9.3	37	
Vermont	6.1	251	4,925	1,095	10.0	72	
West Virginia	4.1	317	4,815	910	10.5	75	
RURAL AVERAGE	5.1	309	4,923	969	9.8	57	
Urban							
California	5.1	634	6,555	1,210	15.2	34	
Massachusetts	4.0	485	6,154	1,356	11.9	59	
New Jersey	4.1	609	6,629	1,565	13.4	46	
New York	4.3	768	6,603	2,005	16.0	56	
Rhode Island	4.6	489	5,917	1,493	13.4	58	
URBAN AVERAGE	4.4	597	6,372	1,526	14.0	51	
U.S. AVERAGE	4.5	518	5,834	1,255	12.5	52	

TABLE 8

ATION STATISTICS IN THE FIVE MOST URBAN STATES AND THE FIVE MOST RURAL STATES

Average School Size 1975	Per Capita Income 1975	$ Per ADA 1974-75	Teachers Salaries (1000's)	Percentage Bused	$ Per Student Bused 1974
582	4,941	834	9.3	61	64
219	5,855	1,032	10.1	41	172
178	4,980	973	9.3	37	141
251	4,925	1,095	10.0	72	81
317	4,815	910	10.5	75	77
309	4,923	969	9.8	57	107
634	6,555	1,210	15.2	34	74
485	6,154	1,356	11.9	59	104
609	6,629	1,565	13.4	46	120
768	6,603	2,005	16.0	56	181
489	5,917	1,493	13.4	58	85
597	6,372	1,526	14.0	51	113
518	5,834	1,255	12.5	52	87

The largest portion of the current expenditures goes to pay instructional staff (65% nationally). As with administrative costs, small schools are often criticized for necessitating uneconomically sized classes, but numbers indicate essentially no difference in proportion of budget for instruction between urban and rural states. The statewide averages show little variation in pupil-teacher ratios, but significantly lower rural salaries which account, in part, for lower per-pupil expenditures. The average salary in the five most urban states is 50 percent higher than the average salary in the five most rural states, reflecting not only some differences in level of experience and education, but also cost-of-living variations.

High transportation costs often must be borne by isolated schools in order to congregate enough students for a school. A few states make allowances for these added costs through categorical grants. Arkansas pays local school districts from $20 per transported student up to $42 per transported student, depending on the population density, while Colorado pays the district by the bus mile. A comparison of the five most rural states and the five most urban states reveals little difference in costs. The total dollars per student for transportation is virtually the same--about $115 in 1976. It seems likely that transportation costs in low-population density areas are matched by the larger school and district size in urban areas, coupled with the busing costs associated with desegregation plans.

Capital costs pose particular problems for rural districts.[13] First, they are very large expenditures in proportion to resources available for operating costs. This means that available property wealth and ability to levy higher tax millage are significant factors in paying for capital needs. In Iowa, for example, the poorest school districts needed to make seven times the effort required of the richest district to fund the average debt service of

$52 per pupil.

The second reason that capital costs are a problem in rural districts is that funds must basically be raised by the sale of bonds. Bond ratings for rural districts are frequently lower than that of the state as a whole. Oregon planners estimated that using the state's higher credit rating would ultimately save the state's schools $3.5 million annually on interest costs.

Third, rural districts that have built new schools, some required by state regulations on reorganization and consolidation, carry large debt service in relation to wealth and to other operating expenses.

The recent movement in America toward equal educational opportunity brought about to a great extent by the Civil Rights Movement, has made the financial plight of the rural poor visible. More and more states are working to achieve fiscal neutrality--financial resources dependent upon effort rather than wealth--through new state aid formulas and compensatory grants. Although equity has not yet been attained, it appears that most rural schools in America have the financial resources to provide a good basic education. Statistically, the budget varies little between urban and rural schools and districts, except in extreme instances. But education, like wealth, is relative. Thus, there is still a need to go further and ensure that rural youth receive an equivalent (but not necessarily similar) education to urban and suburban youth.

IV. DELIVERING EDUCATIONAL SERVICES TO SPARSELY SETTLED REGIONS OF THE UNITED STATES

Introduction

Adequate financial resources do not necessarily guarantee quality education. Rural schools in the United States still are faced with the problem of using their funds to obtain qualified teachers, adequate and appropriate educational materials, sufficiently diversified curricula, and the special services needed to meet individual needs. Lack of educational opportunity, although often rooted in fiscal problems, is interpreted in terms of educational offerings and services. Since schools in sparsely settled areas are most often much smaller than their urban and suburban counterparts, it becomes difficult to deliver necessary services and equipment that can be justified economically only on the basis of larger concentrations of students.

The problem of education in sparsely settled areas can be quite simply divided into two categories: access and quality. First, rural school children have historically lacked access to services and resources required to meet some educational needs, particularly of an unusual or specialized nature. And second, the resources that were available tended to be either inappropriate or simply inferior to those available in metropolitan areas. A recent study in rural Montana concluded that the various components of an educational system, including teachers, buildings, facilities, curriculum, and programs, are usually of lower quality in rural districts than in urban schools. In general, small schools lack the equipment that the large, urban schools can afford.[1] Furthermore,

rural schools in most states have not been able to draw or retain the best-trained, most qualified teachers. The commonly held assumptions about the glamour and attractiveness of city life and about the consequential flow of the brightest youth to the city became a self-fulfilling prophesy. By the 1950s rural America and small-town life had lost much of even the sentimental, nostalgic attractiveness it once held. Consequently, rural schools drew the less dynamic, and often less competent, teachers. Although the trend is now beginning to be reversed, many of the problems inherent in small, isolated schools remain. The concentration of student needs is usually not great enough to justify the desirable range of programs and special resources, and many of the schools are even too remote to use the more costly, centralized educational resources.

In most states, the problem has been further complicated by the fact that educational goals are not based just on local preference, but often are mandated by state education policy. Unfortunately, as state regulations have grown over the years, policies and standards have been heavily influenced by the characteristics and conditions of city schools. Ideologies based on growth and efficiency have directed policy toward a level of specialization difficult, if not impossible, for small, rural schools to attain. State guidelines and regulations for services such as guidance counselors, reading specialists, and science programs are established as universal ones, so that schools of fifty pupils are sometimes required to have the same services as schools of five hundred. Yet, the state is generally unable to help the small, isolated district acquire mandated services that the district economically and logistically cannot maintain independently.

In addition to delivery of service problems, the curriculum itself has become urban-oriented as a result of the dominance of city life, urban

and cultural values. Textbooks emphasize the migration to the cities and the advantages of city life and city work. Thus, a useful analysis of rural education services must include not only their availability, but their congruence with rural life.

The first part of this section will define some of the most pertinent problems facing isolated schools in trying to extend educational services to their students. The specific areas to be discussed are:

- Instruction
- Support Services
- Vocational and Special Education
- Extra Curricular Activities

The latter part of this section will look at some of the particular solutions that have been implemented and some that have been suggested. The methods examined are:

- Technological assistance
- Shared resources with or without regional service centers
- Utilization of community skills and resources

A cursory survey of state education agencies and federal program offices revealed almost a complete absence of any quantitative data from which urban and rural educational resources could be compared. Therefore, much of this section is based on specific examples and empirical evidence gathered from experts in the field.

Instruction

One of the long-standing problems in rural education has been the availability of a sufficiently comprehensive curriculum. Educators have claimed that growing technology and specialization require a more diversified course offering than most small rural schools have been able to offer. At the

elementary school level, diversity is sometimes defined by traditionalists as "frills"--art, music, dramatic, or gym. At the secondary school level, however, even traditionalists recognize the need for something more than basic skills, and diversity comes to mean things like science labs and foreign language programs.

Diversification has become one of the primary rationales for the larger consolidated high school. Large schools are, in fact, able to offer lengthy lists of courses, extending from programs as specific as Intermediate Trombone to courses as esoteric as Bioenergetics or Aristotle, Shakespeare and DNA. The reason for the difference in offerings is obvious. Put simply, the staff of a rural school is too small to include a broad array of specialists. Most post-secondary teacher training programs emphasize specialization and, for the most part, do not prepare teachers for rural schools or rural living.

There are other issues that impinge on the extensiveness of course offerings. In support of rural programs, it should be emphasized that neither course descriptions nor number of offerings always indicate the expansiveness of the curriculum. Elegant titles do not always describe the content, just as simple titles do not necessarily limit the scope of the subject. A one-year course entitled Environmental Science in a rural school may encompass a number of mini-courses and modules such as Earth Science, Environmental Impact, Physical Chemistry and Water Pollution. A survey of Selected Practices in Vermont Secondary Schools for 1972-73, compiled by the State Department of Education, revealed that the state's most isolated schools listed nearly as many curriculum areas as the city schools, though this similarity is not indicated by the course lists.[2] Diversity is more readily attained in a larger or urban school, but is also a function of the structure and creativity of the staff.

On the negative side, a limited curriculum and de-emphasis of expertise

that accompanies familiarity often develops a lack of academic self-esteem in rural students who expect to have to compete with what they perceive as a better educated, more sophisticated urban cohort. Personal survey research in one state indicates that the academic and social skills are considered by students to be more important to future success than the greater degree of participation and personalness afforded them by a small school.[3] Although it may not restrict their aspirations directly, it often inhibits them from entering the larger, more prestigious universities where the competition may be greater. One of the needs of rural education, then, is to not only offer adequate curriculum, but to instill confidence by emphasizing the positive aspects of rural schools and more effectively exploiting their advantages.

Elementary schools have fewer problems if only because there is less of a perceived need for advanced courses at the lower levels. Some of the same problems, however, still persist. In the elementary schools, curriculum is far more closely related to the quality and experience of the staff than to size or isolation. Good teachers can find resources to offer a wide range of experiences. One consequence of the child's isolation is that greater responsibility is placed on the school to provide variety, particularly in terms of exposure to things like career opportunities and to the fine arts.

Support Services

The modern American school is expected to foster more than just cognitive development. It is supposed to provide a process integrating socialization, skill acquisition, and career preparation, and thus, includes aspects of home, school, and work. Schools have assumed part of the responsibility for guidance, counseling, mental and physical health, nutrition, and cultural exposures. These services create needs for special skills and programs that are not always economically feasible in small, isolated schools. Rural communities often

cannot even att act doctors, let alone school nurses and child psychologists.

The provision of support services is no longer simply a matter of local choice. State guidelines and standards set minimal levels for support services that apply to rural as well as urban schools. South Dakota requires one hour of release time per day for every seventy-five high school students with a certified counselor (24 credits of guidance and counseling); Vermont requires one hour for every fifty students or one counselor for every three hundred high school students; Montana requires one counselor for every four hundred high school students (30 credits of guidance and counseling), a separate room for guidance and counseling and a guidance library.

Library services are also a problem in small schools. A library in a school of one hundred students that offers thirty volumes per student is still less extensive than the library in a school of three hundred that offers only fifteen volumes per student. The small school also is often unable to afford (or locate) a full-time librarian. Exacerbating this problem is the fact that good public libraries are usually not located in the rural areas. As a consequence, those with the greatest need have the fewest resources and the least access to any alternative institutions. Library standards, too, vary among states. New Hampshire requires an official school library and does not accept contiguous public libraries as substitutes. Montana accepts one-room schools and will consider alternatives, such as bookmobiles. Whatever the state laws, the quality of school libraries and public libraries is generally directly related to the population density.

Besides the direct support services, rural schools often lack the ability to provide indirect support--namely, planning, management, and evaulation. These functions traditionally have been carried out by experts for large school systems. In the United States, most state agencies have quite weak

planning capabilities, and the little expertise they do possess is invariably directed toward urban problems. Rural schools are left to rely on whatever their own staff can provide in addition to their institutional and administrative duties, and whatever the school board can offer.

Rural schools are thus faced with two problems: being able to afford the special services that cannot be fully utilized and being able to attract competent people. The result of isolation is often having to settle for personnel offering secondary or para-professional skills, who meet minimum requirements, and, in some instances, are quite good but who usually do not have the proficiencies and credentials of specialists.

Extra Curricular Activities

One of the strongest assets of small, rural schools is the degree to which students can participate in extra-curricular activities. Yet in the more isolated schools, this advantage is often mitigated by two facts. First, school buses leave directly after school, further limiting the time most students have for social and extra-curricular activities. Transportation is troublesome in all schools, but in locations lacking public transportation and frequently lacking even good roads, it can become oppressive. Even school athletics become problematic when special means of transportation must be found for participants. If a small number of students are unable to take part due to distance, a small school is severely handicapped and may not be able to field a team. Thus, while the ability to participate is a strong advantage, distance sometimes prohibits full exploitation of the advantages of smallness.

Second, the modern vision of the proper use of a building is preservation and protection solely for formal educational purposes rather than encouragement for use by students after-hours or on weekends. The community school concept is basically rural in nature and has been completely overshadowed by

the emphasis in the 1950s and 1960s on the construction and preservation of large, modern edifices. Parents who made major investments through bond issues and administrators who sold the community on the investment and now feel responsible, tend to be over-protective of facilities at the expense of the students. Rural schools are now often memorials rather than centers of community life as they once were. This, too, limits the potential value of rural education that is characterized by the integration of the school into community life.

Technical and Special Education

Today, as an alternative to the academic curriculum, vocational and technical education is available to most rural high school students. Since vocational education generally requires a high capital investment that most small- and medium-sized school districts cannot afford, two alternate delivery systems are used. Students who attend large, consolidated comprehensive high schools usually receive vocational education instruction right in the institution. Students who attend smaller, rural schools commute to the comprehensive high school or to specially designated regional vocational education facilities. West Virginia, for example, has thirty area vocational-technical schools, plus thirty comprehensive high schools offering vocational education. Eight more are under construction. In the more remote areas, however, accessibility remains a problem. Students in these outlying areas who must depend on regional vocational education schools often are inhibited by the sheer time and energy needed to get to and from their schools. Equality of access does not always exist in practice.

In addition to physical access, enrollment in vocational education is also regulated by another consideration. To a great extent, vocational and technical education in the United States has become a sorting mechanism by

which the students are selectively removed from the main programs. Selection, however, is almost always related to race, sex, or social class. The lower the caliber of the vocational program, the higher the proportion of minorities and poor white males enrolled. When vocational education is physically separated, as it is in rural areas, the differences in occupational status are further accentuated.

The other factor in evaluating rural vocational education is the quality of the program. How well vocational education is performing is dependent not only on the quality of the educational process, but to what extent it is functional. It must not only develop skills, but they must be marketable skills in the current or projected job market. Moreover, if the region is to remain economically healthy, a significant portion of the program should be directed toward regional manpower needs.

Rural vocational education, while accessible, has not always been relevant for rural youth. The rise of agribusiness, the closing of thousands of small farms, and the flood of rural citizens to the cities have altered the structure of the rural work force. Many rural schools do, in fact, still strongly emphasize agriculture even though it is no longer a realistic vocational goal for most. As far back as 1974, an analysis showed that farming jobs existed for only about a third of the agricultural program graduates. Yet, last year the rural vocation programs were still churning out thousands of "future farmers"* (see Table 1). Alternately, non-agricultural programs prepare rural youth for careers for which there are few, if any, local or regional opportunities--careers such as computer programming or solid-state electronics. The task of rural vocational and technical education is to be not only accessible but relevant for local needs. There has to be "urban" choices, but the program must be balanced with programs to meet regional needs.

TABLE 1

PERCENT OF YOUTH IN AGRICULTURAL PROGRAMS, BY STATE

Rural States		Urban States	
Mississippi	12.6	California	5.1
North Dakota	15.1	Massachusetts	1.7
South Dakota	16.4	New York	1.9
Vermont	8.3	New Jersey	0.8
West Virginia	6.0	Rhode Island	2.1
AVERAGE	13.7	AVERAGE	2.3

Special education presents similar problems of access and quality. In isolated regions, small student populations with special needs simply cannot economically justify purchasing the necessary services and facilities. Even categorical state aid is of little value when the resource units are indivisible and the aid is insufficient to purchase an entire unit (teacher or special equipment). Special equipment, training and instruction are needed to work with children with hearing, visual, neuromuscular, emotional, or other disabilities. Instead, the limited resources of rural schools are necessarily directed toward the most prevalent needs, where their effectiveness can be maximized. The most widely utilized model for the delivery of vocational and technical educational services--regional centers--is far less acceptable to the parents of young children for special education. The time and distance from the home that may be satisfactory for a teenager could present a real hardship for the young child. The need for special education for particular disabilities is also less concentrated than the demand for vocational training, exacerbating the problems of scale.

Most rural solutions suggested to provide special education have thus-far been two-pronged--state and regional consulting teachers and in-service

training for classroom teachers. In a few instances, such as in southwest Georgia, cooperatives have been formed to share the costs of special education. If the support were sufficient to properly train classroom teachers and offer the special assistance needed, isolation could be a blessing in disguise for rural children. Rural methods are designed to integrate the exceptional child into the regular classroom wherever possible. For years, in both metropolitan and non-metropolitan areas, exceptional children and problem children have been dumped into special classes regardless of cause or degree of their handicap. Labeling and segregating has tended to stigmatize the special child. Recognizing this, recent state and federal laws are now requiring that in addition to the state's assuming the added costs of special education, the student is to be placed in the least restrictive setting. "Mainstreaming" in order to integrate the child into the normal process as much as possible is not only humane, but it conforms to the early rural American tradition. Prior to the establishment of asylums and institutions, communities cared for their own. Regardless of the morals or values, however, in a quite practical sense, mainstreaming along with regional support may be the only way in which isolated schools can adequately meet state and federal education guidelines for serving exceptional children.

Some Old and Some New Solutions:
Cooperation and Technology

Every region of the United States has made some effort to assist rural, isolated schools. One spinoff from the movement for equal opportunity for minorities over the past decade has been a closer examination of poverty, in general, and rural poverty, in particular. Not surprisingly, most of the effort toward rural educational opportunity has been directed toward getting goods and services to isolated areas, rather than investigating the kinds of services rendered. There is far more consensus over the need for more than

there is over the more obscure and controversial values of a uniquely rural education. This section will concentrate on systems designed to extend educational resources and will comment only briefly on the style of education that could or should be provided.

The techniques and programs for the improvement of rural education to be summarized include:

- The use of technology such as cable television, telephone circuits, computers and satellites
- The sharing of services through regional or intermediate service centers
- The utilization of non-traditional and non-professional community resources

Technology

The use of technology for educational purposes dates back to the 1920s when the first educational radio station began broadcasting from the University of Wisconsin. It was not until mid-century, however, with the advent of television and computers, that technology became any more than a diversion for teachers. Even today, with electronic media taken for granted in most urban and suburban schools, there is a lack of access in remote rural locations. In a technological society, it is not surprising that this has become one of the most popular improvements suggested for rural education.

Cable television is one of the most widely accepted means for supplementing existing educational programs and extending additional expertise to remote locations. Every state has some form of audio-visual facility. A cooperative in Umatillo, Oregon (population 679), for example, developed a television studio and cable system for twenty-two schools over two counties;[5] in Hensley, Arkansas, ten specialists give television presentations regularly to rural schools;[6] in Gadsden, Alabama, seven rural high schools banded together to offer televised instruction;[7] in Virginia, Project DILENOWISCO,[8] a television

cooperative uses their system to reach isolated preschoolers (mobile units with educational equipment also circulate among central locations).

New ways are also being developed to utilize the telephone. The Western States Small Schools Project used an amplifier over the phone so that groups of students or teachers could hear lectures. A school district in the Colorado Rockies has found an innovative way to use the time spent in transporting students to and from rural schools. They installed seven-channel audio tape decks and headsets similar to those on airlines, and programmed the channels at various achievement levels.

One of the most ambitious programs designed to get information to very remote locations not yet reached even by cable television is the National Institute of Education's experimental satellite program.[9] A communication satellite was launched specifically to beam educational television programs to otherwise inaccessible regions in the Rockies, the Appalachians, and in Alaska. In the Rockies, students in fifty-six rural communities across eight states have been receiving programming in their classrooms since 1974. In some of the schools, the students can actually interact and communicate with the program initiation point through the satellite system. This project is still under evaluation, but certainly offers means, although quite costly, of reaching isolated, remote locations.

Regional Centers, Cooperatives, and Cooperation

Technology can act as a substitute for cognitive instruction, but lacks the personal and physical context for experiential learning. To offer substitute services and facilities, and to facilitate sharing of services, a new organizational structure has emerged--the intermediate or regional service center. Supported by a combination of local (44%), state (43%), and federal

(13%)[10] funds (with wide variations among states), these units allow small districts to share services and satisfy special needs that would otherwise be too costly. When control of the operation is maintained at the district level, it can become an effective alternative to the consolidation of entire schools and districts.

Though the intermediate unit has been suggested repeatedly for many years as a means to extend educational offerings to rural areas, it really was not until the passage of the Elementary and Secondary Education Act in the mid-1960s that the concept gained wide acceptance (with the exception of New York State). In 1977, eleven states had legislated mandatory regional centers, four had legislation encouraging regional centers, four had legislation to strengthen multi-district county units, and four had legislation to foster cooperatives[11] (see Table 2). Many of the most rural states, however (e.g., Vermont, South Dakota, North Dakota, New Mexico, Arizona, Kansas, and Idaho) still have no specifically designated regional units.

The lack of a formally organized regional unit does not necessarily preclude the sharing of services. Educational cooperatives have been developed in many of the member states of the Appalachian Regional Commission, which includes Alabama, Mississippi, South Carolina, North Carolina, Virginia, Tennessee, Kentucky, Maryland, and Ohio. Three educational cooperatives have been established in Wyoming. Some of the New England states are organized into districts according to town boundaries, but the towns are grouped into larger supervisory unions for administrative purposes. Small districts within the unions often share teachers in order to afford a wider range of skills. The New Hampshire minimum standards specifically state:[12]

> In New Hampshire, there are schools with small enrollments, such as the one-room and multi-graded schools. We suggest that schools with small enrollments cooperate with other schools within the local school district or supervisory union for staff and services.

TABLE 2

NAME OF REGIONAL EDUCATIONAL SERVICE AGENCY, YEAR ESTABLISHED, AND NUMBER OF OPERATING UNITS, BY TYPE OF LEGISLATIVE FRAMEWORK, JANUARY 1975

State	Year Legislation Enacted	Name of Units	Number of U July 197
MANDATORY LEGISLATION			
1. Georgia	1972	Cooperative Educational Service Agency (CESA)	16 (18 planne
2. Iowa	1974	Area Education Agency (AEA)	15 (effectiv
3. Nebraska	1965	Educational Service Unit (ESU)	19
4. Pennsylvania	1971	Intermediate Unit (IU)	29
5. Texas	1967	Educational Service Center (ESC)	20
6. Washington	1969	Intermediate School District (ISD)	12
7. West Virginia	1972	Regional Educational Service Agency (RESA)	7 (8 planne
8. Wisconsin	1965	Cooperative Educational Service Agency (CESA)	19
9. New Jersey	1977	(Awaiting Governor's signature)	4
10. Michigan	1973	Intermediate School District	58
11. Minnesota	1976	Cooperative Educational Service Agency (CESA)	10
PERMISSIVE LEGISLATION			
1. Colorado	1965	Boards of Cooperative Services (BOCS)	17
2. Connecticut	--	--	6
3. New York	1948	Boards of Cooperative Educational Services (BOCES)	47
4. Oregon	1963	Intermediate Education District (IED)	29

TABLE 2

EGIONAL EDUCATIONAL SERVICE AGENCY, YEAR ESTABLISHED, AND
RATING UNITS, BY TYPE OF LEGISLATIVE FRAMEWORK, JANUARY 1975

Year slation acted	Name of Units	Number of Units July 1974
1972	Cooperative Educational Service Agency (CESA)	16 (18 planned)
1974	Area Education Agency (AEA)	15 (effective 7/1/75)
1965	Educational Service Unit (ESU)	19
1971	Intermediate Unit (IU)	29
1967	Educational Service Center (ESC)	20
1969	Intermediate School District (ISD)	12
1972	Regional Educational Service Agency (RESA)	7 (8 planned)
1965	Cooperative Educational Service Agency (CESA)	19
1977	(Awaiting Governor's signature)	4
1973	Intermediate School District	58
1976	Cooperative Educational Service Agency (CESA)	10
1965	Boards of Cooperative Services (BOCS)	17
--	--	6
1948	Boards of Cooperative Educational Services (BOCES)	47
1963	Intermediate Education District (IED)	29

FIGURE 1

STATEWIDE AND PARTIAL STATEWIDE NETWORK OF REGIONAL EDUCATIONAL SERVICE AGENCIE
JANUARY 1975

FIGURE 1

DE AND PARTIAL STATEWIDE NETWORK OF REGIONAL EDUCATIONAL SERVICE AGENCIES, JANUARY 1975

Voluntary cooperation is still not without problems. According to a New Hampshire department spokesman, autonomous districts sometimes disagree on personnel, the salaries, and the schedule. And there is something of value lost by the fact that the teacher is not committed to a particular school and community. On the other hand, it offers a less bureaucratic alternative to state resources and leaves the community in more direct control of the educational process while providing a means for enlarging the resources of the school.

The most commonly named services provided by regional units are guidance, career education, vocational education, remedial reading, and special education. Some examples of how these units function follows:[13]

Programs employing mobile counselors and counseling centers are used in Arizona:[14]

> Itinerant psychological and social services are provided to school children, including those who are emotionally disturbed, mentally retarded, or physically handicapped. The program tests the feasibility of providing services to thirty-five separate school districts in one county, including many two-, three-, and four-room schools in a 6,256 square-mile area.

In Maine a similar system is in operation:[15]

> A mobile unit has been established to provide guidance and counseling services to students in grades 1-8 in a rural area. . . . Emphasis is placed on (1) comprehensive guidance, counseling and home visits through a planned program of social needs developed cooperatively with parents, families, and social community agencies; (2) remedial instruction; (3) special programs for academic subject fields; (4) cultural education; (5) study areas and library services for after school hours; (6) new media; (7) special education; (8) community involvement; and (9) general followup of students in the area of continued schooling and vocational choices.

In North Dakota:[16]

> Guidance and counseling services for elementary school children have been introduced in a rural area through the use of a mobilized unit. Emphasis is placed upon parental counseling of both elementary and preschool children, including home visitations by guidance personnel.

In rural Georgia:[17]

> Seven superintendents, on their own initiative, formed the Southwest Georgia Program for Exceptional Children. It provides its members with (1) ability to pool state-supported special education teacher units; (2) capacity to offer a wide range of services; and (3) a magnet for skilled professionals, normally reluctant to work in rural areas.

One of the strengths of the intermediate unit is that it is usually service-oriented rather than regulatory. Consequently, it is less threatening to local autonomy while still satisfying state and federal requirements for the extension of specialized services. Based on intercommunity cooperation, it re-establishes the rural tradition of cooperatives. Robert Stephens summarized the significant benefits of regional education service agencies that would help isolated schools in particular:[18]

1. They can facilitate the provision to local districts of easily accessible and definite self-determined supplemental and supportive services of high quality.

2. They can facilitate the development and/or provision of required programs and services to local districts in the event the local unit is unable to do so.

3. They can contribute substantially to the equalization of educational opportunities for all children by minimizing the accident of geography and neutralizing artificial barriers as important determinants of the kind of educational programs available.

4. They can promote the better utilization of known applications and force a systematic search for new applications of cost-benefit/cost-effectiveness principles in the delivery of educational programs and services within the state school system.

5. They can contribute to the healthy interface between urban, suburban, and rural interests in the search for solutions to areawide educational and educationally related issues.

6. They can contribute significantly to the development of a statewide research, development, evaluation, and dissemination network in the state and promote the concentration of and best use of resources to foster the network once it is in place.

7. They can contribute significantly to the establishment of a statewide network of resident change agents possessing both

authenticity in the eyes of their principal constituencies and legal mandates, where necessary; they can also more readily implement the staffing and resources necessary to effect fundamental change in the workings of the state school system on a regular and planned basis.

8. They can substantially promote meaningful local school district involvement in statewide and regional planning and decision-making processes.

Community Resources

One method to expand expertise in remote locations, often so basic as to not warrant documentation, is to utilize all of the skills and resources of the community. Left to their own resources, if they are independent enough to de-emphasize certification requirements and complex contractual agreements, innovative educators can exploit the skills and experience throughout the region. This not only aids the schools, but can also serve the needs of the community members to feel useful, and recreates some of the positive aspects of pre-institutionalized education.

One of the best examples of this is the Foxfire Project.[19] Foxfire began as a magazine in a rural Appalachian community for which high school students went out into the countryside to try to capture, on paper, the oral history of the area and the knowledge that was commonly passed among the inhabitants by word-of-mouth. Traditions, rituals, legends, crafts, and lore--all the local wisdom--was preserved and published. Faith healing, moonshining, mountain crafts, spinning, and wild plant foods were just a few of the topics. The project, subsequently emulated in many rural schools, provided students and elderly citizens the opportunity to learn from each other.

Other schools utilize local resources on a more traditional, structured basis. Parents and local artisans are often asked to help out in the schools in isolated regions where professionalism is weaker, unions less of a threat, and formal procedures minimized. They offer lectures, mini-courses, tutor, or

work as teacher aides. One of the advantages of both small-scale and isolation is flexibility: rural school administrators are less likely to worry about credentials, procedures, and compensation. The degree to which non-professional resources people are used depends to a great extent on the philosophical position of the local administration and the school board. Community participation can bring added expertise to the school, and at the same time, integrate the school into community life.

Non-professional support is not yet a widely utilized technique in rural schools in America, and still has a way to go before it becomes a significant factor. Declining enrollment may, in fact, deter non-professionals as the over-supply of American teachers puts pressure on all schools to hire only within the profession. Professionalism and traditionalism have, in fact, permeated rural education, and there is now some reluctance to use untrained teachers. Community participation was one of the innovations attempted in NIE's experiment with ten rural schools. However, it was not successfully implemented, even with government support. Most American schools remain resistent to any non-traditional program.

Beyond Cognitive Skills: Values and Socialization

Beyond the more immediate concern of adequate resources are the resulting values associated with the programs and services imported. It has been suspected for some time that schools were educating, and thus preparing, youth primarily for urban living. Education has been held partially responsible for the out-migration of youth from rural areas over the past century. Even back in 1904, one state superintendent of schools critically wrote "The tendency to educate all our youth toward the life of cities is deplored by many thoughtful citizens." Today, that trend is beginning to reverse, and

with the new emphasis in American education on cultural pluralism, there are pressures to preserve rural values. Unfortunately, most textbooks in America are published by large corporations with strong urban-industrial biases and most standardized curricula on which schools have come to depend are urban-oriented. Rural life has traditionally been viewed as old-fashioned, and the status of the farmer in America has slipped consistently until it now rates a score of 10-14 on the Blau-Duncan scale of occupational status, along with elevator operators, chauffers, and longshoremen.[20]

There is a need for rural education to provide both entrepreneurial skills and technical assistance to isolated communities so that they can better maintain a viable economic base and still retain their social identity.

Another problem of isolation is the added burden of rural responsibility for schools to accept a greater share of the student's socialization. Rural youth have much more difficulty socializing. They can't just "hang out" as urban youth do, which is a large part of growing up in cities. Educational facilities, therefore, have an even greater responsibility in remote areas. Rural schools, unfortunately, tend to offer fewer opportunities for youth to congregate, not more. For the young child, for example, there are fewer day care centers in rural areas than in urban centers, and fewer children under six in school (see Tables 3 and 4). There is a need to provide early childhood education, not only for the day care benefits to mothers, but for the social and educative benefits of an early school experience to the child.

In addition to the need to place more emphasis on the preservation of rural values is the necessity for expanding the role models so that students have choices. For example, a recent report of the National Advisory Council on Women's Educational Programs stated that "rural areas suffer a dearth of role models and field observation experience which can broaden the realization

TABLE 3

PRE-SCHOOL FACILITIES IN URBAN AND RURAL STATES, 1976

	Percent 3-4-Year-Old in School	Day Care Centers	Day Care Per One Thousand Population
URBAN			
California	20.3	97,050	4.9
Massachusetts	14.0	3,920	0.7
New Jersey	14.2	15,326	2.1
New York	14.3	19,879	1.1
Rhode Island	14.3	1,126	1.2
RURAL			
Mississippi	13.2	202	0.1
North Dakota	4.3	200	0.3
South Dakota	7.1	65	0.1
Vermont	8.9	694	1.6
West Virginia	3.9	957	0.6

TABLE 4

PRE-SCHOOL FACILITIES IN METROPOLITAN AND NON-METROPOLITAN REGIONS OF THE UNITED STATES, 1976

Children in School	Metropolitan	Non-Metropolitan
3-Year-Old	15.2	8.9
4-Year-Old	33.1	18.5
5-Year-Old	73.1	61.2
3-5-Year-Old	41.5	30.2

of young girls that the world offers other career choices than motherhood and secretarial work."[21] Variety of role models, of course, varies according to regional values. In Mississippi, only 2 percent of the enrollment of agricultural programs is female, while in Arizona, the comparable figure is 21 percent, and in Utah it is 42 percent. In general, however, school-related sex roles do tend to be quite traditional. One New England state has no women among its sixty-nine

high school principals, nor among its fifty-four superintendents.[22]

The specific problems mentioned become even more apparent in the career education programs and counseling orientation of rural schools. Most career education programs are prepackaged and standardized and consequently neglect specific regional needs. Guidance and career education is heavily loaded toward urban careers and urban life styles. The challenge of rural education then is to develop an education that will offer real choice at all levels, rather than enticing the more ambitious and higher-achieving students to leave while keeping the poorer students.

V. TEACHER ISSUES IN RURAL AMERICA

Teachers are the key to educational excellence in any community or cultural context. Indeed, the importance of high teacher quality elicits nearly universal agreement throughout the United States.

Still, a compelling case can be made that the need for excellent teachers is most acute in the nation's sparsely settled areas. Two major factors contribute to this heightened importance. First, rural school districts normally employ far fewer specialized support staff members (e.g., curriculum coordinators, career counselors, media specialists, and school psychologists) than do their metropolitan counterparts. And second, most rural communities lack a variety of educational and cultural institutions existing outside the school system. Together, these circumstances imply that rural classroom teachers are unusually important and influential in the development of their students.

Nevertheless, existing policies and programs in the United States do not reflect either the importance of rural teachers or their unique problems. There is a paucity of training programs designed especially for teachers who will serve in rural schools. Rural salary schedules for education personnel tends to be markedly lower than in urban areas. In-service and other professional development activities for teachers are severely constrained in sparsely-populated regions. All in all, there appears to be a notable absence of commitment in the United States to training or retaining excellent rural teachers. This section will document these problems and discuss some potential remedies.

Current Status

In 1976, there were slightly more than two million elementary and secondary classroom teachers employed in United States public schools.[1] Interestingly, the absolute number of teachers has risen since 1974, in spite of declining student enrollments.[2] Classroom teachers still constitute the largest category of public employees in the United States.[3] In fact, approximately 30 percent of all United States public employees (federal, state, and local) work for local school systems.[4]

Historically, one should note not only the enormous increase in the number of teachers (elementary school teachers have doubled and secondary school teachers have multiplied nearly ten-fold since 1920), but also that the growth of the teaching profession far outstripped the growth in student enrollments. Thus, in 1920 there was one elementary school teacher for every thirty-five elementary students, while in 1974 there was one elementary teacher for every twenty-seven elementary students. Similarly, in 1920 there was one secondary teacher for every twenty-two secondary students, while in 1974 the ratio of secondary students to teachers was 14:1. Table 1 reveals some of these historical trends.

TABLE 1

NUMBER OF U.S. PUBLIC STUDENTS AND TEACHERS, 1920-1974

	1920	1930	1940	1950	1960	1970	1974
TOTAL STUDENTS (Thousands)	21,578	25,678	25,434	25,112	36,087	45,619	45,409
Elementary	19,378	21,279	18,833	19,387	27,602	32,597	31,333
Secondary	2,200	4,399	6,601	5,725	8,485	13,022	14,076
TOTAL TEACHERS (Thousands)	657	842	875	914	1,355	2,023	2,156
Elementary	557	632	575	590	834	1,126	1,176
Secondary	100	210	300	324	521	897	980
TOTAL PUPIL-TEACHER RATIO	33:1	30:1	29:1	27:1	27:1	23:1	21:1
Elementary	35:1	34:1	33:1	33:1	33:1	29:1	27:1
Secondary	22:1	21:1	22:1	18:1	16:1	15:1	14:1

SOURCE: National Center for Educational Statistics, The Condition of Education, 1977.
NOTE: Elementary refers to nursery, kindergarten, and grades 1-8. Secondary refers to 9-12 and post-graduate.

In terms of teacher credentials and qualifications, two major trends have emerged over the past fifteen years.

First, teachers today tend to be more educated. In 1964, 17 percent of all public school teachers either had no degree or only a two-year associate degree. By 1975, only 1 percent of all public school teachers were lacking at least a Bachelor's degree. Similarly, in 1964, 16.6 percent of the public elementary staff had a Master's degree, whereas by 1975, the total had grown to 25.9 percent.

Second, teachers today tend to be less experienced. In 1964, nearly one out of every three teachers had twenty years or more of teaching experience. In 1975, less than one out of every five teachers had twenty or more years of teaching experience. Table 2 illustrates these points:

TABLE 2

PUBLIC CLASSROOM TEACHERS, BY EXPERIENCE AND DEGREES HELD, 1964 and 1976

ITEM	1964		1975	
	Elementary	Secondary	Elementary	Secondary
% with Teaching Experience of:				
1-3 years	16.9	22.5	19.8	19.4
4-6 years	14.3	18.1	20.0	18.7
7-9 years	10.1	11.2	13.5	14.3
10-14 years	15.3	15.8	15.6	20.3
15-19 years	11.6	11.2	12.4	11.5
20 years or more	31.8	21.1	18.7	15.8
Median Years of Teaching:	12	9	9	9
Percent, Highest Degree Held:				
No Degree	3.8	0.4		
2-Year Degree	12.1	0.6	1.1	0.6
Bachelor's Degree	66.7	62.6	70.2	54.3
Master's Degree	16.6	33.5	25.9	42.6
Professional Degree, 6 Years	0.7	2.4	2.5	2.2
Doctor's Degree	0.1	0.4	0.2	0.2

During the 1960s, as a result of the so-called "baby boom," there was a distinct teacher shortage in the United States. In response, America's post-

secondary education institutions undertook a major teacher training effort. By the early 1970s, this effort had become, in some senses, almost too successful. In 1975, there were approximately 1,300 post-secondary institutions offering programs in teacher education.[5] And, instead of a shortage, there was now a marked surplus of teachers. For example, the National Center for Educational Statistics noted that in 1974, there was an effective demand for about 150,000 beginning teachers.[6] However, the actual supply of beginning teachers that year exceeded 300,000.[7] NCES projections for 1977 indicate that although supply and demand of beginning teachers are both dropping, there will still be a surplus of approximately 70,000 new teachers.[8]

Rural Teacher Statistics

One clear measure of the disregard accorded to rural teachers in the United States lies in the fact that no one even bothers to collect and analyze data on rural teachers. Neither the federal government, nor the national teacher's organizations (i.e., the National Education Association and the American Federation of Teachers) has issued a major report on rural teachers in nearly two decades. Thus, the data used in this section is suggestive rather than definitive. Further, it must be remembered that, like most aspects of rural education, there is enormous variance both within and among the fifty states.

Despite these data limitations, one thing is apparent--rural teachers constitute a significant body of professional educators. In 1972, there were approximately 790,000 public school teachers employed in non-metropolitan communities.[9] In other words, about one out of every three public school teachers was employed outside a designated metropolitan area.[10]

The problem mentioned most often in regard to rural teachers involves the low salaries they command. The argument is frequently heard that rural

schools will never get their fair share of excellent teachers until they pay wages comparable to those paid in metropolitan communities. The basic assumption which we will examine here is that rural teachers are paid less than urban teachers having comparable credentials.

The aggregate national statistics do reveal some rather startling salary differences for teachers, depending on their location. For example, in 1972, the average salary for the month of October was $1,023 for all public metropolitan teachers, and $785 for all public non-metropolitan teachers.[11] On an annual basis, this translates into $12,276 for metropolitan teachers and $9,420 for their non-metropolitan counterparts. In other words, the average non-metropolitan teacher earns approximately 24 percent less money than the average metropolitan teacher.

Although it is an inexact measure, the teacher salary data on county units corroborates the national indices. In counties having a population of more than 250,000 (and thus likely to be heavily urban), the average monthly earnings of a public school teacher in October 1972 was $1,081 (which is an annual salary of $12,972).[12] By comparison, in counties having a population below 10,000 (and thus likely to be predominantly rural), the average monthly earnings of a public school teacher in October 1972 was $703 (which is an annual salary of $8,436).[13] Once again, the average rural teacher earned approximately 35 percent less money than the average urban teacher.

There is one more inexact, but useful, national breakdown of teacher salaries--that is, by school district size. In school districts enrolling 3,000 or more pupils, the average monthly earnings of a teacher in October 1972 was $987 (or $11,844 annually).[14] However, in school districts having less than fifty pupils (and there were 2,053 such districts in 1972), the average monthly earnings of a teacher in October 1972 was $521 (or $6,252 annually).[15] Teachers

in these very small districts, found primarily in sparsely populated areas, had an average salary which was 47 percent lower than teachers in larger and more urban school systems.

Confronted with these dramatic differences, some educators argue that these figures fail to account for two factors--cost-of-living differences and teacher credential/experience differentials. If the cost-of-living really were substantially different in urban and rural communities, and if rural schools were mainly hiring teachers with Bachelor's degrees and little experience, while urban schools were hiring teachers with Master's degrees and lots of experience, this rationalization would have a degree of validity. However, even if correct, it is unlikely that these factors would end up equalling the 24 percent, 35 percent, and 47 percent urban-rural teacher salary differentials discovered.

The state of Nebraska has compiled some interesting statistics on this topic. In 1976-77, Nebraska had 800 Class I (rural, K-8) schools, the majority of which were one-teacher institutions in the most sparsely settled areas of the state.[16] The salary range for teachers in Class I schools was $4,840-$15,600 per annum.[17] The average teacher salary in these schools was $7,788 per year.[18] In fact, the median salary for a Class I teacher with a Master's degree was only $8,610 in 1976-77.[19] By comparison, Class IV and V (urban, K-12) school districts, the average annual teacher salaries were $12,557 and $12,018 respectively in 1976-77. Once again, average rural teacher salaries are almost 40 percent below urban salary averages.[20]

Cost-of-living data was not available by school district in Nebraska. However, the most recent data did not substantiate the claim that rural schools hire predominantly low-credentialed, inexperienced teachers. Indeed, in the rural Class I districts, average teacher experience was 12.6 years compared

to twelve years in Class IV districts and ten years in urban Class V districts.[21] Less than 10 percent of Class I teachers were in their first year of teaching.[22] Urban districts in Nebraska did hire more teachers with Master's and other advanced degrees than Class I districts, but approximately 80 percent of the rural teachers had at least a Bachelor's degree.[23] Thus, it would appear that comparably qualified teachers do receive significantly lower salaries in rural areas.

Rural Teacher Characteristics and Concerns[24]

Although much has changed since the time when this year's rural teacher was last year's rural student, being a teacher in a rural school does carry with it some unique problems and potentials.

For example, teachers in the small rural school remain accountable to the community in ways virtually unimaginable in cities and suburbs, where they tend to be viewed as specialists whose personal lives are separate from those of their students' families. Rural teachers still tend to come from the communities in which they teach (or from communities so like them as to be virtually indistinguishable).[25] And practical considerations of distance and housing availability generally compel then to live near their schools. Thus, the role of teacher remains important to the community outside the classroom as well as in it.

To find job satisfaction as a rural teacher, it is apparently necessary for a person to fit comfortably into this broadened and comparatively unspecialized role. Muse, Hoppe and Parsons found that teachers from rural backgrounds were most able to do this. They conclude that "the most dissatisfied rural teachers tend to have been raised in urban areas,[26] and that those same teachers tend to find "social acceptance more difficult"[27] in the country community.

The Utah evidence provided by Muse et al. seems to suggest that the rural schoolteacher is still typically the rural born-and-reared woman, returning home to teach the next generation. She is far better educated than her turn-of-the-century counterpart, and is far more likely to have seen some of the world, but she has remained in touch with the basic concerns and values of the rural community. This kind of teacher will help to maintain cultural continuity between home and school, and she will feel comfortable in pursuing this end.

Teaching "the basics" and reinforcing community standards continues to be the dominant task of the rural school. Schooling is still considered critically important--Muse, Hoppe and Parsons found more teachers than parents who felt it was important for children to be home at choretime rather than spending additional time in school. But the emphasis is still on basic academics and behavior trainings.

The Muse, Hoppe and Parsons study shows that "a sizable proportion of students (38%) and parents (30%) tend to support the statement that teachers hold too high expectations of the students."[28] Very few of their parent-respondents, however, agreed with the statement "The schools are too strict." Obedience, discipline, and fundamental skills continue to be central to contemporary rural education.

The close ties between school and community can put unpleasant pressures on teachers as well as children. The Muse, Hoppe and Parsons survey reports that teachers find "community cliques, gossip, and small-town talk," one of the chief drawbacks to country teaching.[29] Those little messengers ready to spread the good classroom word from one end of the community to the other can be pernicious as well.

The most frequent and serious rural school problem usually cited in the

literature is a lack of creative and innovative teaching. The issue of innovation in rural schools is a complex one, and cannot be simply laid at the feet of rural political conservatism and social tradition. In fact, there is some evidence suggesting that rural communities are far more interested in educational innovation than is commonly assumed. Paul Ford's study of small high schools found students yearning for more intellectual stimulation and more access to new resources.[30] Similarly, the Utah study found parents, administrators, teachers, and students in strong agreement that their schools needed "innovative teachers with new methods more than additional 'traditional' teachers."[31]

Teacher training programs in the United States have paid little attention to the needs of teachers in small rural schools. Although the literature is full of moaning about the poor quality of rural teachers, little systematic effort has been made to recruit the best people for rural schools, and even less effort has been made to train them properly. As Muse, Hoppe and Parsons point out:[32]

> A recent study of university offerings revealed that in 1969, no more than six universities in the nation offered courses which might be of any prospective value specifically to the rural teacher.

The training gap is being gradually closed, as the meager efforts of universities are supplemented by regional centers and in-service training programs. But the amount of professional support given the rural teacher will not compare with that given the urban and suburban teacher for many years to come.

Most rural teachers, then, enter their classroom with little or no special preparation for meeting the needs of country children. And, unlike the urban or suburban teacher, they cannot call on professionally-designed commercial materials to help them. For fifteen years, curriculum developers have undertaken countless projects for urban children, ranging from Sesame Street to

minority-oriented social studies curricula for the high schools. For twenty years, carefully-designed suburban curriculum packages have been available. During the same period, virtually nothing has been done for the rural child. There is no profit in it for the publishing companies--there are fewer absolute numbers in rural areas, and there is less similarity among country regions than there is among cities. Unfortunately, philanthropic and governmental funding sources have not (with some notable exceptions) made up for this lack of commercial interest in rural education. As a result, the teacher looking for innovative materials for a class of impoverished urban children has a vast array to choose from; a teacher looking for similar resources for a group of poor country pupils must generally be resigned to teaching about fire hydrants, manicured lawns, skyscrapers, and other accoutrements of urban/suburban life.

Even if the teacher has the resourcefulness to design rural-oriented materials alone, there are still problems to be faced. The poverty characteristic of rural areas has traditionally tightened the bond between community and school. The in-kind contributions which replaced the outlay of money brought the consumers of education nearer to its source, and added to the sense of accountability and responsibility. But today, the needs of schools are so complex and require so much money and expertise that community contributions fill less of the gap. The poor school district cannot afford to hire a science consultant to design a curriculum around their woodland. Usually, they cannot even afford to buy teachers the time to do it themselves.

Some extraordinary teachers do it anyway. They take the time out of their personal lives, and collect materials from the community and from the natural resources of the countryside. But many teachers do not have this creative energy, and struggle along with the outdated textbooks and inappropriate materials which are all the poor rural community can afford.

Teachers who must handle multiple grades are limited as well. Depth of preparation is difficult, especially in a variety of subject areas, for instructors who must teach every period. One study of small high schools in Washington State found that:[33]

> Teachers in small schools studied average between five and six preparations in different subject areas each day. It is unrealistic to suppose that a teacher could be adequately prepared in this number of subjects and, in addition, keep up with curriculum development in all the subjects.

Conclusions and Recommendations

Just as rural reformers sought "better" curricula, so too have they clamored for "better" teachers. Once again, though, the definition of "better" is of considerable importance. Usually, by "better," these reformers meant "more credentialed," "more highly specialized," and "urban trained."

Yet, while there is little doubt that rural schools could benefit from the presence of better teachers, it is not at all clear that the traditional meaning of "better" is appropriate or helpful in the rural context. In fact, a very persuasive case can be made that higher academic credentials, in and of themselves, have minimal validity as a measure of actual teaching competence; that rural schools require competent generalists far more than a variety of specialists; and that teachers trained to understand and work with the unique strengths and weaknesses of rural schools are much more desirable than urban-trained and urban-oriented teachers from even the most prestigious universities.

Perhaps an example from the health field can shed some light on this point. In the past few years, there has been a significant shift in the medical profession away from training large numbers of highly sophisticated specialists, and toward training "family practice" doctors (i.e., general practitioners). This trend is a particular asset to rural areas which do not need a neurosurgeon

in town nearly as much as a general practitioner who can call upon the services of a neurosurgeon when necessary.

Similarly, rural schools need teachers who are (contradictory as it may sound) specially trained to be generalists. The best rural teachers are the ones who are able to cope with sparsity, utilize community resources, invent curricular materials, and, above all else, are oriented toward teaching children rather than subjects. When a corps of specialists are available to these rural teachers (for example, through a multi-district educational service agency) the range of human resources available to aid rural schoolchildren can be quite extensive and impressive.

Thus, the highest priority in this area is to create training programs in colleges and graduate schools of education across the country which will explicitly prepare teachers for service in rural schools. At present, there are no more than a handful of teacher training programs in the entire nation which directly assist students interested in rural education careers. Teachers are still the backbone of any school system, and the fact that rural schools must accept teachers without specialized rural training puts them at a disadvantage they can ill-afford.

The second priority here is to dramatically expand in-service training (and other professional development activities) for rural teachers and administrators. In most rural communities, the professional growth and development of school personnel is impeded first, by the fact that rural districts rarely provide continuing in-service programs and second, by the fact that the kinds of external opportunities for professional development available in urban areas (e.g., teacher centers and universities) are notably absent in rural areas. It is unreasonable to expect teachers and administrators, already burdened by the heavy workloads characteristic of rural schools, to do everything on their own

time and of their own initiative. Teachers need time to share ideas and problems with their counterparts, both within their own, and other school systems. They also need the time and resources to develop curricular materials, take needed courses, and keep up with recent advances in their fields.

State and federal officials often lament the teacher quality found in rural schools. Yet, far more would be accomplished by their sponsorship of rural in-service training programs than by simply decrying the competence of rural educators. Once again, where local colleges are either inaccessible or unresponsive to this need, multi-district educational service agencies are a potential source of assistance.

The third priority is to increase the voluntary sharing of teachers, both among schools in the same district and between neighboring rural districts. Since most rural schools neither need nor can afford full-time teachers in every subject area, there is great utility in the notion of sharing teachers (for example, a music/art teacher at the elementary level and an advanced math/physics teacher at the secondary level) among rural schools and districts. Some rural districts already employ this strategy extensively, but most still haven't tried it or use it only sparingly. Done properly, sharing teachers can be a valuable asset in overcoming the problem of scarce human resources in sparsely-settled areas.

The fourth and last priority in this area is to create a "community faculty" to complement and extend the regular educational program in rural schools. Nearly every rural community has individuals with special talents or a knowledge of subjects not found among the regular faculty. For example, in coal mining regions, community residents could (either as volunteers or as paid part-time employees) teach labor history to local students. In black, native American, or Hispanic communities, local citizens could be used to develop

a whole cultural heritage program in the schools. Under this program, a local cabinet maker, mechanic, agricultural extension agent, or other skilled resident could share his area of expertise with local students. In addition, retired members of the community and other older citizens often constitute an invaluable reservoir of untapped information and human resources which could be harnassed here to advance the education of young people in rural areas.

By inaugurating such a "community faculty" program, extensive educational and social benefits can accrue to all rural community members. The students will have learning experiences not otherwise available to them. The school personnel will receive an infusion of needed moral and programmatic support. And, the community will have the chance both to become an integral part of their children's school experience and to feel needed and wanted by people and institutions about which they care deeply. Indeed, the small-scale life style and close-knit character of most rural communities makes this community faculty both a feasible idea and a unique opportunity.

REFERENCES

INTRODUCTION

[1]Compulsory attendance is a matter of state, rather than federal policy. Most states make education compulsory for children from five years of age to sixteen years of age. However, one predominantly rural state (Mississippi) has no compulsory school attendance laws.

[2]National Center for Education Statistics, The Condition of Education, 1977 (Washington, D.C.: U.S. Department of Health, Education and Welfare, 1977).

[3]The most important exception here is the state of Hawaii which has only one school district for the whole state. The state of Alaska recently dismantled its state-operated school system in the most sparsely populated areas of the state and established more than twenty sub-state regional and local districts instead.

[4]National Center for Education Statistics, The Condition of Education, 1977.

[5]Ibid.

[6]Ibid.

SECTION I

[1]For exact statistics and further information on this topic, see Vera J. Banks, Farm Population Estimates, 1975 (Washington, D.C.: U.S. Department of Agriculture, Economic Research Service, October 1976).

[2]This diversity is magnified by the fact that in rural areas, tradition is highly valued and one's particular ethnic, racial, occupational, or regional heritage, tend to be both prized and carefully cultivated.

[3]The official U.S. Census Bureau definition of urban and rural in 1970 is as follows:

> The urban population comprises all persons in (a) places of 2,500 inhabitants or more incorporated as cities, villages, boroughs (except Alaska), and towns (except in New England, New York, and Wisconsin), but excluding persons living in the rural portions of extended cities; (b) unincorporated places of 2,500 inhabitants or more; and (c) other territory, incorporated or unincorporated, included in urbanized areas. An urbanized area consists of a central city, or twin cities, with a total of 50,000 inhabitants

or more, together with contiguous, closely-settled territory (urban fringe). Certain incorporated places are designated as "extended cities" because they have one or more large portions with relatively low population density. These portions are classified as rural. In all definitions, the population not classified as urban constitutes the rural population.

[4]As of 1975, there were 266 SMSAs in the United States. In 1973, these SMSAs had a total population of 152,473,000. For further information, see U.S. Bureau of the Census, Statistical Abstract of the United States, 1976 (Washington, D.C.: U.S. Government Printing Office, July 1976), Tables 14, 15, 16, 17, 18, and 21.

[5]In 1970, there were 16,412,000 individuals living in rural areas of the SMSAs. In the same year, there were 26,318,000 individuals living in urban areas outside the SMSAs. The figures here are from: U.S. Bureau of the Census, Statistical Abstract of the United States, 1976, Table 16.

[6]Ibid., Tables 16 and 23.

[7]Calvin L. Beale, The Revival of Population Growth in Nonmetropolitan America (Washington, D.C.: U.S. Department of Agriculture, Economic Research Service, June 1975), p. 3.

[8]Ibid., p. 5.

[9]President's National Advisory Committee on Rural Poverty, The People Left Behind (Washington, D.C.: U.S. Government Printing Office, 1967).

[10] Ibid.

[11] For further information see: U.S. Bureau of the Census, Statistical Abstract of the United States, 1976, Table 195.

[12] Ibid.

[13] Ibid.

[14] The total enrollment in non-metropolitan schools is 15.4 million persons. The total population of New York City, Los Angeles, and Chicago combined is approximately 13.5 million residents. See Statistical Abstract of the United States, 1976, Tables 195 and 23. Note: As the following table indicates, the rural youth population (under 25 years of age) is even greater, totalling over 25 million persons.

RURAL YOUTH UNDER 25 YEARS OF AGE IN THE UNITED STATES BY REGION AND RACE OR ETHNIC GROUPS, 1970[1]

NUMERIC DISTRIBUTION AND PROPORTIONS AMONG GROUPS

		Race or Ethnic Group			
	Total	White*	Black	Spanish Heritage*	Native American
North Central	7,400,329 (100.00)	7,287,110 (98.47)	63,237 (0.85)	57,314 (0.77)	43,683 (0.59)

Table (continued)

	Total	Race or Ethnic Group			
		White*	Black	Spanish Heritage*	Native American
North East	4,394,545 (100.00)	4,314,846 (98.18)	17,698 (0.40)	66,263 (1.50)	6,353 (0.14)
South	10,419,202 (100.00)	8,114,718 (77.88)	2,237,518 (21.47)	256,415 (2.46)	59,301 (0.56)
West	2,799,872 (100.00)	2,546,675 (90.95)	28,242 (1.00)	347,809 (12.42)	145,076 (5.18)
Total	25,013,948 (100.00)	22,263,349 (89.00)	2,346,695 (9.38)	727,801 (2.90)	254,413 (1.01)

Percentages are shown in parentheses.

SOURCES: U.S. Bureau of the Census, "1970 Census of Population Fourth Count Summary Tape," Processed at Texas A&M University Computer Center.

U.S. Bureau of the Census, 1970 Census of Population: Subject Reports, Final Report PC(2)-1F, American Indians.

*Most persons of Spanish Heritage are counted also in the White category, so there is double counting; the sum of the groups will be greater than the total. A smaller number of Spanish Heritage persons are also counted as black.

[1]This table was taken from a recent publication by Luis Jimenez, "The Ethnic Composition of Rural Youth in the United States: General Characteristics and Regional Comparisons." Departmental Information Report No. 73-3, Texas Agricultural Experiment Station, Prairie View A&M University, Prairie View, Texas.

[15]U.S. Bureau of the Census, General Social and Economic Statistics, Census of the Population, 1970; Final Report PC(1)-C1 (Washington, D.C.: U.S. Government Printing Office, 1972), Table 88, p. 386.

[16]U.S. Bureau of the Census, Population Characteristics (Washington, D.C.: U.S. Government Printing Office, March 1974).

[17]Marian Wright Edelman, Marylee Allen, Cindy Brown, Ann Rosewater et al., Children Out of School in America (Cambridge, Mass.: Childrens' Defense Fund, 1974), p. 37.

[18]Ibid.

[19]Ibid.; note: The 1970 Census revealed that absenteeism, permanent or chronic, varies with the income, education, and occupation of the parents, as well as their race and residence. Children's enrollment varies inversely with

the income and education level of the parents. Non-whites are less likely to enroll than whites. The percentage of children not enrolled is greatest for children of farmworkers (7%): a figure even higher than that for children of the unemployed. Additionally, the non-enrollment rate is greater for children of farmers than for those in most occupations.

[20] See, for example: James S. Coleman et al., Equality of Educational Opportunity (Washington, D.C.: U.S. Department of Health, Education and Welfare, U.S. Office of Education, OE-38001, 1966); W. Vance Grant and C. George Und, Digest of Educational Statistics: 1974 Edition (Washington, D.C.: National Center for Educational Statistics, U.S. Department of Health, Education and Welfare, 1975); Lewis R. Tamblyn, Inequality: A Portrait of Rural America (Washington, D.C.: Rural Education Association, 1973).

[21] National Assessment of Educational Progress, General Information Yearbook (Washington, D.C.: U.S. Government Printing Office, December 1974). Also see: George Henderson, National Assessment and Rural Education (Los Cruces, New Mexico: ERIC Clearinghouse on Rural Education and Small Schools, December 1973). Note: NAEP invented its own definition called "extreme rural." This denotes non-metropolitan communities with a population under 8,000 and a workforce which is primarily agricultural rather than professional or industrial.

SECTION II

[1] U.S. Bureau of the Census, 1972 Census of Governments: Vol. I, Governmental Organization (Washington, D.C.: U.S. Government Printing Office, July 1973), Table 13.

[2] Source for Figures 1, 2, and 3 here is 1972 Census of Governments-Vol. I, Governmental Organizations, Table 2.

[3] Ibid.

[4] For an overview of the history of rural school reform, see: Stuart A. Rosenfeld and Jonathan P. Sher, "The Urbanization of Rural Schools, 1840-1970" in Education in Rural America: A Reassessment of Conventional Wisdom, edited by Jonathan P. Sher (Boulder, Colorado: Westview Press, 1977).

[5] U.S. Bureau of the Census, Governmental Organization, Table 13, p. 19.

[6] Jonathan P. Sher and Rachel B. Tompkins, Economy, Efficiency, and Equality: The Myths of Rural School and District Consolidation (Washington, D.C.: National Institute of Education, July 1976). Note: Copies of this report are available free by writing to the School Finance and Organization Division, National Institute of Education, Washington, D.C. 20208.

SECTION III

[1] Fifty-Seventh Annual Report of the Massachusetts Board of Education, 1894, p. 103.

[2] Thirty-Sixth Vermont School Report, 1900, p. 30.

[3]Extracted from The Condition of Education, 1977 Edition, National Center for Education Statistics (Washington, D.C.: U.S. Government Printing Office, 1977), p. 170; and Digest of Education Statistics, 1975 Edition, National Center for Education Statistics (Washington, D.C.: U.S. Government Printing Office, 1976), p. 65.

[4]Advisory Commission on Intergovernmental Relations, Financing Schools and Property Tax Relief (Washington, D.C.: AEIR, 1973), p. 36. Also see: Allan Odden and Phillip Vincent, The Regressivity of the Property Tax, Report No. F76-4, Education Commission of the States (Denver, Colorado: December 1976).

[5]A. Odden, Alternative Measures of School District Wealth, Report No. F76-6, Education Commission of the States (Denver, Colorado: December 1976), p. 16.

[6]Benjamin L. Huff, Property, Education, and Taxes in Vermont, Vermont Natural Resources Council (Montpelier, Vt.: January 1977).

[7]Mary F. Williams, Dollars and Sense: A Guide to the Data and Statistics of School Finance (Washington, D.C.: National Conference of State Legislatures, August 1976), p. 12.

[8]From the computer printouts by Vermont Economic Research Corporation, Woodstock, Vermont.

[9]Report of the Task Force on School Finance of the South Dakota State Board of Education (Denver, Colorado: Education Commission of the States, 1976), p. 25.

[10]Esther Tron, Public School Finance Programs, 1975-76 (Washington, D.C.: U.S. Government Printing Office, 1976).

[11]Roe L. Johns, "An Index of Extra Costs of Education Due to Sparsity of Population," Journal of Education Finance 1 (Fall 1975): 170.

[12]J. Alan Thomas, Financing Rural Schools, ERIC/CRESS, Bulletin (Austin, Texas: National Educational Laboratory Publishers, Inc., March 1974), pp. 48-49.

[13]This discussion of capital costs was excerpted from: Rachel B. Tompkins, "Coping With Sparsity: A Review of Rural School Finance," in Education in Rural America: A Reassessment of Conventional Wisdom, edited by Jonathan P. Sher (Boulder, Colorado: Westview Press, 1977).

SECTION IV

[1]John W. Kimble, Gail L. Cramer, and Verne W. House, Basic Quality of Secondary Education in Rural Montana, Bulletin 685 (Bozeman, Mont.: Montana Agricultural Experiment Station, April 1976), p. 3.

[2]Survey of Selected Practices in Vermont Secondary Schools (Montpelier, Vt.: Vermont State Department of Education, July 1973).

[3]Stuart A. Rosenfeld, "Centralization or Decentralization: A Case Study of School and District Organization in Vermont." Ph.D. dissertation, Harvard University, 1977.

[4]Arthur M. Lee and Don Fitzgerald, Learning a Living Across the Nation, Project Baseline, Part 2, Vol. 5 (Flagstaff, Arizona: Northern Arizona University, November 1976), p. 9.

[5]Martha Boustaunau, Small Schools Can Have Adequate Curriculums (Austin, Texas: National Educational Laboratory Publishers, Inc., March 1975), p. 5.

[6]Ibid., p. 6.

[7]Ibid.

[8]Ibid.

[9]Lawrence Grayson, "Educational Satellites: The ATS-6 Experiments," J. Educational Technology Systems 3 (Fall 1974): 89-123.

[10]"The Emerging Role of Regional Service Centers," Proceedings of the Second National Conference of the National Federation for the Improvement of Rural Education (Austin, Texas: National Educational Laboratory Publishers, June 1974), p. 11.

[11]E. Robert Stephens, Regional Educational Service Agencies. Phamphlet published by Educational Research Service, Inc., Arlington, Virginia, 1975. (Updated data from Dr. Stephens included, April 21, 1977).

[12]Minimum Standards and Recommendations for New Hampshire Public Elementary School Approval (Concord, N.H.: State of New Hampshire Department of Education, January 1974), p. 6.

[13]Stephens, Regional Educational Service Agencies, pp. 57-58.

[14]Richard R. DeBlassie and Martha Ludeman, Guidance Programs and Practices in Rural and Small Schools, ERIC/CRESS (Austin, Texas: National Educational Laboratory Publishers, Inc., October 1973), p. 27.

[15]Ibid., p. 28.

[16]Ibid., p. 28.

[17]Ibid.

[18]Stephens, Regional Educational Service Agencies.

[19]Eliot Wigginton, ed., The Foxfire Book (New York: Anchor Books, 1972).

[20]Peter M. Blau and Otis Dudley Duncan, The American Occupational Structure (New York: John Wiley & Sons, 1967).

[21]Kathryn F. Clarenback, Educational Needs of Rural Women and Girls, Report of the National Advisory Council on Women's Educational Programs (Washington, D.C.: January 1977).

[22] Lee and Fitzgerald, Learning a Living, p. 110.

SECTION V

[1] U.S. Bureau of the Census, Statistical Abstract of the United States, 1976 (Washington, D.C.: U.S. Government Printing Office, 1976), Tables 219 and 221.

[2] Telephone interview with National Center for Educational Statistics staff member. Advance statistics indicate that in the Fall of 1976, there were approximately 2,198,000 public school teachers in the United States compared to approximately 2,156,000 in 1974. This increase in teachers occurred despite an elementary school enrollment decline of almost 5.5 million students and an overall enrollment decline of over 1 million students.

[3] U.S. Bureau of the Census, 1972 Census of Governments, Vol. 2 (Public Employment) (Washington, D.C.: U.S. Government Printing Office, 1974), Table 4.

[4] Ibid.

[5] American Association of Colleges of Teacher Education, Selected Facts About Education in the United States of America (Washington, D.C.: AACTE, 1977).

[6] National Center for Educational Statistics, The Condition of Education, 1977 (Washington, D.C.: U.S. Government Printing Office, 1977), Table 2.09.

[7] Ibid.

[8] National Center for Educational Statistics, Projections of Educational Statistics to 1984-85 (Washington, D.C.: U.S. Government Printing Office, 1975). According to NCES, the 1977 new teacher supply will be approximately 199,000 while new demand will be for approximately 126,000.

[9] U.S. Bureau of the Census, 1972 Census of Governments (Vol. 2), Table 9. The figure used refers to full-time equivalent employment (F.T.E.) for public school teachers. There were 779,485 full-time non-metro teachers and 57,766 part-time non-metro teachers in the United States in 1972, according to this Census Bureau report.

[10] Since "non-metroplitan" includes places not normally considered to be "rural," a more realistic estimate is that there are approximately 500,000 rural teachers. This still means that nearly one out of every four public school teachers in the United States are working in rural schools.

[11] U.S. Bureau of the Census, 1972 Census of Governments (Vol. 2), Table 9.

[12] Ibid., Table 16.

[13] Ibid., Table 16.

[14] Ibid., Table 22.

[15] Ibid., Table 22.

[16] Nebraska State Department of Education, Statistics and Facts About Nebraska Schools, 1976-77 (Lincoln, Neb.: NSDE, 1977).

[17] Nebraska State Education Association, Salary Survey of Nebraska Class One Schools (1 to 6 Teachers), 1976-1977 (Lincoln, Neb.: NSEA, 1977).

[18] Ibid.

[19] Ibid.

[20] C. Cale Hudson, Herbert Small, Kathy Dwyer, Ranking of Nebraskas's Class II, III, IV, and V School Districts by Selected Financial Data, 1975-76, 1976-77 (Lincoln, Neb.: University of Nebraska, 1977).

[21] Ibid.

[22] Nebraska State Education Association, Salary Survey.

[23] Ibid.

[24] This section is excerpted from Faith Dunne, "Choosing Smallness: An Examination of the Small School Experience in Rural America," in Education in Rural America: A Reassessment of Conventional Wisdom, edited by Jonathan P. Sher (Boulder, Colorado: Westview Press, 1977).

[25] Ivan D. Muse, Robert J. Parsons, and Edward M. Hoppe, "A Study of Rural Teachers and the Rural Schools as Perceived by School Administrators, Teachers, Parents, and Students" (Salt Lake City, Utah: Brigham Young University, 1975).

[26] Ibid.

[27] Ibid.

[28] Ibid.

[29] Ibid.

[30] Paul Ford, "Small High Schools: Myth, Reality, Potential," The Bulletin of the National Association of Secondary School Principals, vol. 51 no. 317 (March 1967).

[31] Muse, Parsons, and Hoppe, A Study of Rural Teachers.

[32] Ibid.

[33] Ford, "Small High Schools."